

CITADEL ADVISORS LLC
Southeast Financial Center
200 S. Biscayne Blvd., Suite 3300
Miami, FL 33131
305-929-6851

www.citadel.com

This Brochure provides information about the qualifications and business practices of Citadel Advisors LLC and its relying advisers. If you have any questions about the contents of this Brochure, please contact the Client and Partner Group at 312-395-3146 or ClientandPartnerGroup@citadel.com.

The information in this Brochure has not been approved or verified by the United States Securities and Exchange Commission (the “SEC”) or by any state securities authority. Additional information about Citadel Advisors LLC and its relying advisers also is available on the SEC’s website at www.adviserinfo.sec.gov.

March 31, 2023

ITEM 2 – MATERIAL CHANGES

There have been no material changes to the Brochure since the Advisers' last updating amendment, filed on March 31, 2022.

TABLE OF CONTENTS

Item 4 – Advisory Business	3
Item 5 – Fees and Compensation	4
Item 6 – Performance-Based Fees and Side-By-Side Management	6
Item 7 – Types of Clients.....	6
Item 8 – Methods of Analysis, Investment Strategies and Risk of Loss	6
Item 9 – Disciplinary Information	41
Item 10 – Other Financial Industry Activities and Affiliations	41
Item 11 – Code of Ethics, Participation or Interest in Client Transactions and Personal Trading.....	43
Item 12 – Brokerage Practices	51
Item 13 – Review of Accounts.....	52
Item 14 – Client Referrals and Other Compensation.....	53
Item 15 – Custody	53
Item 16 – Investment Discretion.....	53
Item 17 – Voting Client Securities.....	53
Item 18 – Financial Information	54
Appendix A – Notice of Privacy Policy	55

Item 4 – Advisory Business

Citadel Advisors LLC (“Citadel Advisors”) is a Delaware limited liability company and has its principal place of business in Miami, Florida. Citadel Advisors and its predecessors have been in the investment advisory business since 1990. Citadel Advisors manages private investment funds offered exclusively to sophisticated investors, in certain cases with assistance from its affiliates Citadel Advisors Europe Limited (“Citadel Europe”), Citadel Asia Limited (“Citadel Asia”), Citadel France SAS (“Citadel France”), and Citadel Advisors Singapore Pte. Limited (“Citadel Singapore” and, together with Citadel Advisors, Citadel Europe, Citadel Asia, and Citadel France, the “Advisers”). The Advisers are affiliated advisers organized as separate legal entities conducting a single advisory business. As such, the Advisers are permitted to satisfy their obligation to register with the SEC through filing of a single Form ADV by Citadel Advisors, with Citadel Europe, Citadel Asia, Citadel France, and Citadel Singapore as relying advisers. The private investment funds managed by the Advisers generally invest their assets directly or indirectly in other private investment funds (referred to as the “sub-funds”), which are also managed by the Advisers and through which the Advisers pursue their investment strategies. In this Brochure, each of the private investment funds managed by the Advisers, and the sub-funds in which they invest, are generally referred to as a “Fund,” and are generally referred to collectively as the “Funds.”

As of December 31, 2022, the Advisers had approximately \$51,573,787,000 of assets under management, all of which was managed on a discretionary basis.

Citadel Advisors is wholly owned by Citadel Advisors Holdings LP. Citadel Europe is wholly owned by Citadel Americas LLC. Citadel Asia, Citadel France and Citadel Singapore are each wholly owned by Citadel Hedge Fund Holdings II LP. The Advisers are indirectly controlled by Citadel GP LLC or its related persons and use the investment personnel, infrastructure and support provided by Citadel Americas LLC and Citadel Americas Services LLC and their affiliates. Citadel GP LLC and Citadel Americas LLC and Citadel Americas Services LLC are controlled by Kenneth Griffin, their Founder, Chief Executive Officer and Co-Chief Investment Officer.

The Advisers are members of a group of affiliated entities that together comprise a leading global financial institution with a diverse business platform (collectively, “Citadel Group”), which includes two separate and distinct units: (i) a global investment firm (“Citadel”) and (ii) a global market maker (“Citadel Securities”).

The Advisers have discretion with respect to investment decisions they make for the Funds, and also with respect to the selection of brokers, dealers and other counterparties for such transactions, and the amount of commissions or other compensation to be paid by the Funds. The Advisers provide investment advisory services to the Funds based on the particular investment objectives and strategies described in the applicable Fund’s Offering Documents (defined below).

All discussions of the Funds in this Brochure, including but not limited to their investments, the investment strategies used in managing the Funds, the fees and other costs associated with an investment in the Funds, and conflicts of interest faced by the Advisers in connection with their management of the Funds, are qualified in their entirety by reference to each

Fund's respective confidential offering memorandum (if any) and governing documents (referred to collectively as the "Offering Documents").

Item 5 – Fees and Compensation

The Advisers do not currently have a general fee schedule. The fees and expenses associated with an investment in the Funds vary, depending on the Fund, and each Fund's Offering Documents describe them in detail. The Advisers may, in their discretion, manage other funds or accounts with higher or lower fees, different fee structures, and different expense payment arrangements, than those of the Funds. Certain Funds require investors to pay a withdrawal charge to withdraw an investment, depending upon the amount and timing of the withdrawal and other factors, which is paid to the Fund, not to Citadel. In addition, Citadel Enterprise Americas LLC (together with its subsidiaries and related entities, as applicable, "Citadel Enterprise"), Citadel Enterprise Americas Services LLC, Citadel Hedge Fund Holdings LP, Citadel Americas Services LLC and/or certain other affiliated entities (collectively, the "Citadel Parties") provide certain administrative and investment-related services to the Funds pursuant to one or more written agreements.

The Funds

Direct Expenses of the Funds

Each Fund is responsible for direct expenses incurred in connection with or otherwise related to its operations and activities, including expenses associated with its investment portfolio and its proportionate share of the direct expenses of the underlying sub-funds in which it invests, including brokerage commissions and other transaction costs. Item 12 of this Brochure discusses how the Advisers select brokers, and how the Advisers determine the reasonableness of their compensation. Each Fund pays its expenses directly or reimburses the Citadel Parties, as instructed, for expenses paid on its behalf. The direct expenses incurred by each Fund vary depending on the nature of the operations and activities of the Fund and each Fund's respective Offering Documents describe them in detail.

The Citadel Parties seek to allocate direct expenses of the Funds that are incurred on behalf of multiple Funds fairly among the applicable Funds, in accordance with one or more allocation protocols established by the Citadel Parties from time to time. The Citadel Parties believe such allocation protocols are reasonable; however, other reasonable options may exist that may yield different results, including results that would be more beneficial to one or more Funds.

Reimbursable Expenses

The Funds fully reimburse the Citadel Parties for all of their costs and expenses other than those costs and expenses that are entirely unrelated to the services the Citadel Parties provide to the Funds (the "Reimbursable Expenses"). The Reimbursable Expenses allocated to each Fund are material, both on an absolute basis and as a percentage of a Fund's net asset value. Reimbursable Expenses include the compensation of all employees and third-party consultants/contractors of the Citadel Parties and costs related to office space, including rent payments, building operating expenses, including utilities and real estate taxes, impairments, and occupancy related expenses, leasehold improvements, including costs associated with financing, as described in the applicable Fund's Offering Documents.

The Citadel Parties seek to allocate Reimbursable Expenses fairly among the Funds. The Citadel Parties determine the allocation of Reimbursable Expenses among the Funds in accordance with one or more allocation protocols established by the Citadel Parties from time to time. The Citadel Parties believe such allocation protocols are reasonable; however, other reasonable options may exist that may yield different results, including results that would be more beneficial to one or more Funds. While the allocation of Reimbursable Expenses among the Funds is designed to generally reflect each Fund's consumption of resources of the Citadel Parties and generation of revenue, certain Reimbursable Expenses will be specifically allocated only to certain Funds, other Reimbursable Expenses will be disproportionately allocated to certain Funds, and some Reimbursable Expenses will be allocated ratably among the Funds. The apportionment of Reimbursable Expenses among the Funds involves subjective determinations, which may involve conflicts of interest.

Conflicts of interest have arisen, and are expected to arise, in connection with the reimbursement of expenses related to office space, where entities owned and controlled by Citadel's Chief Executive Officer own or have an interest in the applicable office building. The Advisers may take such actions to address these conflicts of interest as they determine appropriate, including through the establishment of an independent real estate committee to serve as representative of investors, as described in each Fund's respective Offering Documents.

Management Fees

In addition to bearing direct expenses and their allocable portion of Reimbursable Expenses, certain Funds also pay Citadel Hedge Fund Holdings LP a management fee (the "Management Fee") in respect of such Funds calculated and payable monthly, at an annual rate of 1% of the net asset value of the applicable Fund. The Management Fee generally offsets the Performance Allocation in respect of such Funds. The Offering Documents applicable to each Fund that pays a Management Fee describe in detail the specific terms governing the structure and calculation of the Management Fee and the corresponding Performance Allocation offset.

Citadel Intellectual Property

The intellectual property and trademarks of alternative asset managers are generally regarded as having significant value. It is in Citadel's interest to continue expending substantial sums, some of which will be funded from direct expenses of the Funds, certain expenses reimbursed by the Funds and/or the Management Fee applicable to certain Funds, to develop its intellectual property. The Funds have no right to or property interest in Citadel's intellectual property.

Directors' Fees

Funds that are governed by a board of directors remunerate the directors at market rates. Such Funds also reimburse the directors for all travel, hotel and other expenses properly incurred by them in connection with their performance of services to the Funds, and, in particular, in attending and returning from any meetings of the directors, committees of the directors and general meetings.

Administrator's Fee

Northern Trust Hedge Fund Services LLC (the “Administrator”) performs certain middle and back office administrative and operational services for the Funds, such as trade reconciliation and settlement functions, and acts as the administrator to the Funds. The Funds pay the Administrator a fee for its services at an annual rate agreed upon by the Administrator and the relevant Fund. The Administrator’s fee may be based on the investment capital of the Fund and may take into consideration the aggregate investment capital of the Fund and certain other Funds. For certain Funds, the Administrator’s fee is subject to certain monthly minimum levels. The Administrator’s fee is not included in the Reimbursable Expenses.

Item 6 – Performance-Based Fees and Side-By-Side Management

The Advisers generally receive an allocation from each Fund equal to a percentage of the positive difference between the net asset value of each investor’s investment in the Fund and the “high water mark” attributable to such investment (the “Performance Allocation”) as of each December 31. The Advisers also generally receive the Performance Allocation as of each date that the Fund makes a distribution or capital payout to an investor or the date that an investor withdraws capital or transfers an interest in the Fund. The Offering Documents applicable to each Fund describe in detail the specific terms governing the structure and calculation of the Performance Allocation and high water mark, which may vary between Funds.

The Performance Allocation arrangements may give the Advisers an incentive to engage in more speculative investment strategies in an effort to maximize a Fund’s profits and receive greater compensation. The Advisers seek to allocate investment opportunities in a manner that they believe treats all Funds fairly over time.

Item 7 – Types of Clients

The Advisers provide investment advisory services to the Funds based on the particular investment objectives and strategies described in the applicable Fund’s Offering Documents.

Investors in the Funds generally are required to complete and submit a subscription agreement binding them to the terms of a Fund’s Offering Documents. Certain Funds admit only sophisticated U.S. taxable investors that are both “accredited investors,” as defined in Rule 501(a) of Regulation D under the Securities Act of 1933 (the “1933 Act”), and “qualified purchasers” (or “knowledgeable employees”), as defined in the Investment Company Act of 1940 (the “Investment Company Act”) and the rules thereunder. Other Funds generally admit only sophisticated non-U.S. investors, or sophisticated U.S. tax-exempt investors that are both “accredited investors” and “qualified purchasers.” The minimum initial investment for the Funds’ investment capital is \$10,000,000. The Advisers may waive these minimums in their discretion. Other limitations also may apply.

Item 8 – Methods of Analysis, Investment Strategies and Risk of Loss

For certain Funds, the Advisers will take both long and short positions in a broad range of investment instruments, while the Advisers will utilize a narrower range of investment instruments

for certain other Funds. The Funds' investment policies generally do not prohibit them from taking management control of entities in which they invest.

The Advisers generally employ, for the benefit of the Funds, proprietary investment strategies based upon fundamental research as well as on quantitative analysis. The sub-funds generally invest on a highly leveraged basis, and the Funds may leverage their investments in the underlying sub-funds.

Certain of the Funds managed by the Advisers are multi-strategy Funds that impose no limitations on the investment instruments, markets or countries in which the Advisers may invest, on the investment strategies which the Advisers may employ, or on the type or amount of borrowings which the Advisers may enter into on their behalf. For these Funds, the Advisers will opportunistically implement whatever investment strategies or discretionary approaches the Advisers believe from time to time may be best suited to prevailing market conditions. Over time, the investment strategies implemented on behalf of these Funds can be expected to expand, evolve and change, perhaps materially. The Advisers generally will not be required to implement any particular investment strategies for the multi-strategy Funds and may discontinue employing any particular strategy, whether or not such investment strategies are specifically described in the relevant Fund's Offering Documents, without notice to the Funds or investors.

The Advisers manage other Funds that have a more specific strategy or set of investment strategies, investment instruments, markets or countries in which they may invest. Each such Fund's respective Offering Documents describe these in detail.

Following is a description of some of the more significant investment strategies that the Advisers may use on behalf of the Funds generally, investment instruments in which the Advisers may have the Funds invest, and the risks associated with them. Not all of the investment strategies, investment instruments and associated risks are relevant to all Funds.

Investment Strategies

Equities

The equities strategy invests in the equity and equity-linked securities of companies globally, with a primary focus on United States and European issuers. The Advisers may take directional and/or relative value positions on behalf of the Funds, both long and short, on a global basis, investing in a broad range of investment instruments (which include securities, options, futures, currencies, derivatives and other instruments) and may employ such sub-strategies as they determine, including event-driven. The equities strategy primarily employs fundamental research and financial analysis to identify and capture opportunities.

Fixed Income and Macro

The fixed income and macro strategy primarily invests in the global currency, equity and fixed income markets, with a focus on G-10 markets. The Advisers may take directional and/or relative value positions on behalf of the Funds, both long and short, on a global basis, investing in a broad range of investment instruments, including sovereign debt, currencies and currency forwards,

futures, interest rate swaps, equity indices, options, mortgage-backed securities, and other derivatives. The fixed income and macro strategy primarily employs macroeconomic analysis and quantitative modeling to identify and capture opportunities.

Commodities

The commodities strategy invests in a range of products in the global commodities markets including agricultural products, crude oil and refined products, natural gas, and power, with a primary focus on markets in the United States and Europe. The Advisers may take directional and/or relative value positions on behalf of the Funds, both long and short, on a global basis, investing in a broad range of investment instruments, including futures, forwards, currencies, options, securities, and other derivatives. The commodities strategy also includes buying and selling physical commodities (e.g., natural gas) and related derivatives thereof, and contracting for transportation and storage capacity for such commodities. The commodities strategy also involves principal investments in equity securities and debt instruments of public and private companies in the sector. The commodities strategy primarily employs fundamental analysis and quantitative modeling to identify and capture opportunities.

Credit

The credit strategy focuses on investments in the corporate debt, equity, and equity-linked securities of companies globally, with a primary focus on United States and European issuers. The Advisers may take directional and/or relative value positions on behalf of the Funds, both long and short, on a global basis, investing in a broad range of investment instruments, including options, credit indices, equities, sovereign debt, convertible debt securities, credit derivatives, collateralized loan obligations, and other derivatives and structured investment products, and may originate or purchase corporate or other loans. The credit strategy primarily employs fundamental research and financial analysis in the pursuit of its directional positions and quantitative modeling in the pursuit of its relative value positions.

Quantitative Strategies

The quantitative strategies focus on investments in the equity, fixed income, commodities and currency markets globally. The Advisers may take directional and/or relative value positions on behalf of the Funds, both long and short, on a global basis, investing in a broad range of investment instruments, including equities, sovereign debt, corporate debt, currencies and currency forwards, futures, interest rate swaps, equity indices, options, and other derivatives. The quantitative strategies team employs primarily statistical and quantitative modeling and predictive analytics to identify and capture opportunities.

Third Party Managers

The Advisers from time to time, on behalf of certain Funds, allocate a portion of their assets to funds or accounts managed by investment managers that are not affiliates of the Advisers. For example, from time to time, the Advisers will agree, on behalf of certain Funds, to invest and retain capital in a fund managed by a third-party manager in exchange for both an interest in the fund and a right to share in certain additional profits of the fund or the manager. Such funds or accounts

may be subject to asset-based or performance-based fees payable to the investment managers (and such fees will not reduce the Performance Allocation, Management Fee, or expenses borne by any such Fund).

Significant Risks

Investing in securities, derivatives and other financial instruments involves risk of loss that investors in the Funds should be prepared to bear. There can be no assurance that a Fund's objective will be achieved or that the investment strategies the Advisers employ will be successful. Investors must be prepared to lose all or substantially all of their investment. The following describes the principal risks involved in the Advisers' investment strategies, generally. Not all of these risks will be equally relevant to each Fund at any given time.

General Risks

Risk of Loss

An investment in a Fund involves a high degree of risk, including the risk that the entire amount invested may be lost. Hedge funds are subject to significant risks to which traditional investments are not.

Performance Volatility

The Funds' performance may be highly volatile. The investment results of a Fund may vary substantially over time and sustained losses could result in the inability of the Fund to retain or deploy capital.

Past Performance Not Indicative of Future Results

The past performance of the Funds is not indicative of the Funds' future results. There can be no assurance that the Funds will achieve their objectives or avoid substantial losses.

Competition

The activities in which the Funds engage are highly competitive. There can be no assurance that the Funds will be able to compete successfully against a broad array of competitors. In addition, the use by the Advisers' competitors of quantitative strategies similar to those utilized on behalf of the Funds could have material adverse effects on the Funds, including by reducing available investment opportunities.

Concentrated Investment Strategy

Certain Funds focus on investing in a single investment strategy. Although the range of investment opportunities within a single investment strategy may be broad, structural, economic and regulatory changes or general market conditions could adversely affect the investment strategies employed by the Advisers on behalf of such Funds. There have been periods, including recently, when market conditions were adverse to these investment strategies. The single-strategy focus of certain Funds' portfolios may cause their performance to be more volatile than that of a portfolio

more diversified across asset classes and could cause such Funds to suffer severe losses if the applicable securities market remains disrupted for an extended period.

Reliance on the Citadel Parties

The Funds have no employees. The Funds must rely on the Advisers' management, and the administrative and investment-related services provided by the Citadel Parties.

The performance of the Funds depends to a large degree on the efforts of the individuals employed by the Citadel Parties. The Citadel Parties face intense competition in attracting and retaining talented professionals. Any circumstances which might result in a diminution of service levels provided to the Funds by the Citadel Parties could materially adversely affect the Funds. Certain investment professionals responsible for the activities undertaken on behalf of the Funds have other responsibilities on behalf of the Citadel Parties and conflicts of interest may arise as a result in the allocation of personnel.

There are no limitations on the ability of Citadel to form or manage other Funds of any nature whatsoever or on any such Funds engaging in transactions with other Funds. Moreover, there are no limitations on the ability of Citadel Group to engage in other business or investment activities, whether related or unrelated to the Funds.

Should the Advisers cease to act as investment adviser to the Funds, no assurance can be given that the Funds would be able to find and recruit a replacement investment adviser with similar experience, credibility and access to intellectual property and investment talent or as to the length of time the search for a replacement would take. Any delay in finding another portfolio manager could adversely impact the achievement by the Funds of their investment objective.

Operational Risks

The investment strategies employed by the Advisers are highly dependent on information systems and technology. Any failure, breach or deterioration of these systems or technology due to human error, data transmission failures, hacking, cyberattacks, operational risks, or other causes could have a material adverse effect on the Funds' operations. A disaster or a disruption in the infrastructure that supports Citadel's business, including a disruption involving electronic communications or other services that Citadel, or that third parties with whom Citadel conducts business, use or directly affecting one of Citadel's offices or facilities, may have a material adverse effect on Citadel's ability to continue to operate its business without interruption. Although Citadel has back-up facilities for its information systems as well as technology and business continuity programs in place, there can be no assurance that these will be sufficient to mitigate the harm that may result from such a disaster or infrastructure disruption. In addition, insurance and other safeguards might only partially mitigate the effects of such a disaster or disruption.

Citadel relies on third-party service providers for certain aspects of its business, including certain financial operations of the Funds. Any interruption or deterioration in the performance of these third parties could impair the quality of the Funds' operations and negatively impact the investment strategies employed by the Advisers on the Funds' behalf.

Computer Systems Risks; Cybersecurity

Citadel relies to a material extent on a wide range of computer hardware and software, including both equipment and programs licensed from its affiliates as well as those licensed from third parties (collectively, “Computer Systems”). Citadel uses Computer Systems in substantially all phases of its operations, including research, valuation, trade identification and construction, trade execution, clearing, risk management, back office functions, and reporting.

The Advisers depend on the reliability and functionality of the Computer Systems for the implementation of the investment strategies that they employ on behalf of the Funds and the maintenance of their books and records, and Computer Systems are subject to a number of inherent and unpredictable risks. For example, from time to time: there may occur material errors in software programs that are either unrecognizable or not recognized for significant periods; software and/or hardware may malfunction and/or degrade; telecommunications failures, power loss or natural disasters may occur; security breaches may lead to a variety of adverse consequences, including but not limited to, unintended trades, stolen intellectual property, the dissemination of confidential information relating to trading positions, investors and employees, and the disruption of Citadel’s operations; services provided by third party vendors to support the Computer Systems may be interrupted; and computerized trading programs may generate and/or execute transactions many times the magnitude of, as well as in the opposite market direction to, the transactions which would have been effected were it not for a Computer Systems error.

The performance of the Funds, as well as various critical processes of the Advisers, could be severely compromised by trading errors (including design and implementation errors), computer viruses, cybersecurity (including ransomware) or physical security breaches, and software related “system crashes.” Any event that interrupts or compromises the Advisers’ computer and telecommunications operations could result in, among other things, the inability of the Advisers to establish, modify, liquidate, hedge, or monitor a Fund’s investments or the permanent loss or disruption of some or all of the Advisers’ critical data and systems. These events could cause a Fund to lose trading connectivity or to trade in unintended ways or cause the Advisers to expose confidential information. They could also result in regulatory intervention or cause the Advisers to suffer reputational harm, which could result in substantial redemptions from the Funds.

While Citadel generally takes into account the above risks in designing its systems, has business continuity procedures in place and devotes considerable resources to preventing, identifying and containing the effects of Computer Systems errors, exposures to these risks nonetheless exist. Computer Systems errors may occur from time to time, and any failure by Citadel to implement or adjust its monitoring of a particular system or software could result in Citadel failing to detect unusual activity or such errors for a long period of time. Investors in the Funds should assume that such errors will be both for the account of the Funds and could, over time, be potentially material to their performance. In the case of severe business disruptions, resulting for example, from a power outage or hardware failures, the Advisers may not be able to resume their activities for extended periods of time depending on the severity of the outage or failures and the systems impacted. Moreover, while Citadel has certain security monitoring in place, the tactics, techniques, and procedures used to obtain access to data, disable or disrupt service, or sabotage systems change frequently and Citadel may fail to adjust or enhance its security monitoring

appropriately or in a timely manner to be effective in identifying, preventing or remediating such threats or attacks.

While Citadel takes protective measures against cybersecurity attacks, there can be no assurance that security will not be breached. Further, the Advisers rely on a number of third-party vendors for critical services, including cloud computing providers, data providers, data storage, telecommunication providers, software and hardware vendors, the Administrator, and certain executing and prime brokers, and no assurance can be provided that the vendors or counterparties of Citadel or the Funds will not be subject to a security breach. Any interruption of the services provided by third-party vendors, which could occur for reasons outside of the control of the Advisers, may disrupt the Advisers' ability to effectively trade and manage the portfolio of the Funds and otherwise operate their business. Furthermore, use of third-party vendors exposes the Advisers to additional information security risks. Hardware or software acquired or licensed from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise the Advisers' information security. In addition, network connected services provided by third parties may be susceptible to compromise, leading to a breach of the Advisers' network.

Any cyberattack, interception or mishandling of information, or other security breach could result in the corruption, loss or disclosure of Citadel's or the Funds' intellectual property or trading strategies, or the improper use or disclosure of confidential information about Citadel, the Funds or the investors in the Funds, which could have a material adverse effect on the Funds and/or investors in the Funds.

Human Error

The decision making of Citadel personnel will have a significant impact on the performance of the Funds. Citadel personnel are responsible for implementing and modifying the investment strategies and models used by the Funds. In some cases, Citadel personnel may input data or make investments manually. All such actions and decisions are subject to human error, which could have a material adverse effect on the performance of the Funds.

Errors in Trade Execution and Settlement

Certain of the investment techniques used on behalf of the Funds require the rapid and efficient execution of transactions, or the ability to accumulate or liquidate large positions. Inefficient execution can eliminate the market opportunities that such techniques seek to capture.

Errors in executing specific trading instructions may occur in the course of carrying out activities, and transactions may be executed on terms other than those intended. Errors may result from system errors or from mistakes made by individuals. Examples of trading errors include: (i) buying or selling an investment instrument at a price or quantity that is inconsistent with the specific trading instructions generated by a particular investment team or investment strategy; or (ii) buying rather than selling a particular investment instrument (and vice versa). The Funds are also subject to the risk that counterparties will fail to settle a transaction in accordance with its terms and conditions. Losses resulting from errors in trade execution and settlement could have a material adverse effect on the performance of the Funds. The Advisers will (unless the Advisers otherwise

determine) generally treat all trading errors (including those which result in losses and those which result in gains) as for the account of the applicable Fund or Funds.

Non-Pro Rata Items

A sub-fund may determine (either at the time an investment is made or at a later date) to allocate future profit and loss associated with an investment among its investors on a non-pro rata basis (e.g., to certain Funds and not others). The Advisers may determine, among other reasons, to effectuate such non-pro rata allocation because a particular investment may have adverse tax, regulatory or other consequences to a Fund or certain investors therein but not to another Fund or the investors therein. In such event, the Fund(s) that is not participating in the profit and loss of the applicable investment may be allocated an increased percentage of the profit and loss of the other investments held by the sub-fund. By way of example, a sub-fund in which multiple Funds invest may hold shares in an issuer that announces that it is making a significant dividend to its shareholders. In the event that the Advisers determine that the receipt of such dividend may have an adverse tax impact on a particular Fund or its investors (but not on other Funds or the investors therein), the Advisers may determine, prior to the receipt of such dividend, to cause such sub-fund to allocate future profit and loss associated with such investment to such other Funds but not to the Fund that may be subject to such adverse tax impact. However, the Advisers are under no obligation to make any such non-pro rata allocations and may choose not to allocate an investment on a non-pro rata basis even where an investment may have an adverse tax or other consequence on a particular Fund or the investors therein. In addition, no assurance can be provided that such non-pro rata allocation will not have an adverse effect on a particular Fund. An investment that is not allocated to a Fund by a sub-fund may be realized at a profit. Conversely, in the event that a significant loss attributable to an investment exceeds the sub-fund capital accounts of the Funds participating in such investment, such loss will be borne by the remaining investors in the sub-fund.

Investment Allocations

A Fund that employs similar investment strategies as another Fund may invest in certain sub-funds, or directly or indirectly have exposure to certain investments, in which such other Fund does not. In making such allocation determinations, the Advisers may consider such factors as it determines in its discretion, including whether a particular investment may have adverse tax, regulatory or other consequences to a particular Fund or certain investors therein but not to others. For example, from time to time the Advisers may determine to not have one or more Funds domiciled outside of the United States invest in certain sub-funds that engage in investment strategies that may be treated for U.S. federal income tax purposes as giving rise to income that is effectively connected with the conduct of a trade or business within the United States. Given the negative tax consequences of such income for such Funds and the investors therein, the Advisers may determine not to have such Funds invest in such investment strategies even though one or more other Funds that employ similar investment strategies invest therein.

As a result of the foregoing, among other factors, the returns of an investment in one Fund may differ significantly from the returns of an investment in another Fund that pursues similar strategies.

Potential Reorganizations and Restructurings

The Advisers may reorganize certain aspects of the investment strategies that they deploy on behalf of the Funds or expand the scope of such investment strategies. Among other things, the Advisers may establish separate Funds for different investment strategies, combine certain existing investment strategies into separate portfolios or implement new investment strategies in a stand-alone Fund or Funds, rather than or in addition to retaining them as part of the existing Funds' portfolios, as well as discontinue certain investment strategies. Any such stand-alone Fund or Funds might be available to existing as well as new investors, only to existing investors, to certain existing investors but not others, only to all or certain Citadel Related Parties (as defined below) or other investor groups. Moreover, certain structural changes to the Funds may be made in conjunction with any restructuring or otherwise. Any such restructuring could materially diminish the investment capital of the Funds or the composition of the Funds' portfolios. For purposes of this Brochure, "Citadel Related Parties" means (i) the Advisers; (ii) any one or more of Advisers' affiliates; (iii) any person which is an owner, officer, director, manager, managing member, member, partner or employee of the Advisers and/or any one or more of the Advisers' affiliates; and/or (iv) any spouse or child (including adopted children) of any of the foregoing persons.

General Portfolio Risks

Risk Management

The Advisers actively take risk on behalf of the Funds, which are directly exposed to the risk of loss under a wide variety of market conditions. The Advisers have established risk management processes to identify, measure and monitor risks associated with the investment activities undertaken on behalf of the Funds. These risk management processes are intended to assist the Advisers in their investment decision-making process on behalf of the Funds, and to identify certain risk exposures that the Advisers may choose to hedge or otherwise mitigate. However, the risk management processes may fail to identify or anticipate a wide variety of risks that may adversely affect the Funds, which could have a material adverse effect on the performance of the Funds.

Correlation with Financial Markets

Many investors seek to achieve diversification in their holdings by investing in hedge funds. The Advisers, in managing the Funds' portfolios, generally do not seek to achieve any particular correlation with traditional asset classes or markets such as equities and/or fixed income. Nonetheless, at any time, the Funds' portfolios, or portions of the portfolios, may be highly correlated with the traditional asset classes or markets such as equities and/or fixed income, and during such periods may not provide diversification benefits.

Technical Analysis

The Advisers incorporate technical analysis factors, i.e., the analysis of historical and current market data, into their investment decisions made on behalf of the Funds. Specifically, the Advisers focus on analyzing supply and demand of certain investment instruments based on issuance schedules, types of issuances and the behavior of large market participants with respect to such investment instruments. Technical analysis is subject to the risk that unexpected

fundamental factors or other factors may dominate the market during certain periods. Furthermore, a frequent premise of technical analysis is that past market conditions are indicative of future market prices. The influx of different market participants, structural changes in the markets, the introduction of new financial products, and other developments could materially adversely affect the profitability of investments made based upon technical analysis.

Fundamental Analysis

Fundamental analysis, which is based on the theory that market mispricings exist because market prices do not accurately incorporate all knowable economic and other relevant data, is subject to the risk of inaccurate or incomplete market information, as well as the difficulty of predicting future prices based upon analysis of all known information. Investments made based upon fundamental analysis are subject to significant losses when market sentiment leads to investment instruments' market prices being materially discounted from the expected prices indicated by fundamental analysis (as in the case of "flights to quality" when the demand for certain risky investment instruments plummets) or when technical factors, such as price momentum encouraged by trend following, dominate the market.

Model Risk

Certain of the investment strategies employed by the Advisers on behalf of the Funds are highly dependent on quantitatively based pricing theories and valuation models, which the Advisers use to evaluate investment opportunities. These models generally seek to forecast future price changes based upon a limited number of factors and inputs. The forecasts generated by these models may differ substantially from actual future price realizations, resulting in material losses to the Funds. There can be no assurance that the models used by the Advisers on behalf of the Funds will be effective or that they will be effectively utilized by the Advisers. Moreover, there can be no assurance that the Advisers will be able to continue to develop, maintain and update the models. The models used by the Advisers may depend upon inputs from various sources, and in the event such inputs are not accurate, unexpected losses may be incurred. The Advisers anticipate the continued modification, enhancement and development of models. Each new generation of models (including incremental improvements to current models) exposes the Funds to the possibility of unforeseen losses from a variety of factors, including conceptual failures and implementation failures.

Projections

The Advisers may make investments on behalf of the Funds that rely upon projections developed by the Advisers concerning a given investment instrument's future performance and associated cash flows. Projections are inherently uncertain and subject to factors beyond the control of the Advisers. The inaccuracy of certain assumptions, the failure to satisfy certain financial requirements and the occurrence of unforeseen events related to certain projections could result in material losses to the Funds.

No Formal Diversification Requirements

The Advisers may take highly concentrated positions in investment instruments for a Fund based on counterparty, issuer, industry, geography, market and/or investment strategy (in each case,

directly or, in the case of derivative instruments, by reference). Any such concentration may subject the Funds to greater risk of loss than would a more diversified approach.

Relative Value Strategies

The success of the relative value strategies utilized by the Advisers on behalf of the Funds depends on market values converging towards the valuations determined by the Advisers' investment teams and/or the quantitative models utilized by such teams and their ability to utilize these relative mispricings among interrelated investment instruments. The relative value strategies that the Advisers employ on behalf of the Funds are subject to the risks of disruptions in historical price relationships, the restricted availability of credit and the obsolescence or inaccuracy of valuation models used. In the event of market disruptions, the Funds may incur significant losses that may force the Advisers to close out one or more positions on behalf of the Funds. Such disruptions have in the past resulted in substantial losses for investors in Funds employing relative value strategies. Furthermore, the quantitative models used to determine whether a position is mispriced may ultimately prove to be inadequate or erroneous or the assumptions used in modeling inaccurate. Such disruptions, inadequacies, errors or inaccuracies could have a material adverse effect on the performance of the Funds.

Directional Strategies

Directional investing is subject to all the risks inherent in incorrectly predicting future price movements. Often these price movements will be determined by unanticipated factors and the Advisers' analysis of known factors may prove inaccurate, in either case potentially leading to substantial losses.

Event-Driven Strategies

Event-driven strategies seek to identify security price changes resulting from corporate events such as restructurings, mergers, takeovers, spin-offs, exchange offers, tender offers and other special situations. Corporate event arbitrageurs generally choose their investments based on their perceptions of the likelihood that the event or transaction will occur, the amount of time that the process will take and the perceived ratio of return to risk. The success of event-driven trading depends on the successful prediction of whether various corporate events will occur or be consummated. The consummation of mergers, exchange offers, tender offers and other similar transactions can be prevented or delayed, or the terms changed, by a variety of factors. There is no assurance that the Advisers will correctly evaluate the nature and magnitude of the various factors that could affect the prospects for a successful merger, exchange offer, tender offer or other similar transaction. Index rebalancing strategies rely on directional long and short positions based on anticipated modifications and reweighting of securities making up a certain index or indices. These strategies may result in increased concentration risk with respect to securities or issuers that are part of such an index. There can be no assurance that the Advisers will correctly forecast these modifications or reweightings or the resulting security price changes. In addition, since other market participants may also pursue index rebalancing strategies and may enter into similar directional trades (on a long and/or short basis) at or around the same time, losses in index rebalancing strategies may be amplified.

Volatility Strategies

Volatility trading strategies attempt to profit from volatility misvaluations among the global equity and credit markets through taking directional positions, either long or short, on the level of volatility in certain markets. There is no assurance that the quantitative investment process or forecasts produced by the models used by the Advisers will be accurate or that such strategies will be successful. Price movements are influenced by many unpredictable factors, such as market sentiment, inflation rates, interest rate movements and general economic and political conditions. While volatility can create profit opportunities, it can also create a risk that historical or theoretical pricing relationships will be disrupted, causing the Funds to incur losses.

Illiquid Investment Instruments

Certain investment instruments held by the Funds may be, or may become, illiquid and may not have readily ascertainable fair market values. The Advisers may only be able to liquidate these investment instruments on behalf of the Funds, if at all, at disadvantageous prices.

No Limitations on Strategies

There are no limitations on the investment strategies which the Advisers may use when investing assets on behalf of the Funds. The Advisers will opportunistically implement on behalf of the Funds whatever investment strategies or discretionary approaches the Advisers believe from time to time may be best suited to prevailing market conditions. Over time, the investment strategies the Advisers implement can be expected to expand, evolve and change, perhaps materially. The Advisers will not be required to implement any particular investment strategies and may discontinue employing any particular investment strategy on behalf of the Funds, without notice to Fund investors. There can be no assurance that the various investment strategies which the Advisers expect from time to time to develop and implement for the Funds will be successful or that investment strategies that have been successful will continue to be profitable.

No Limitations on Investment Instruments

There is no limitation on the investment instruments in which the Advisers may invest on behalf of the Funds. New investment instruments are continually developing and investments in such investment instruments may involve material and as yet unanticipated risks. The Funds invest in exchange-traded instruments and instruments that are traded off-exchange in the over-the-counter ("OTC") market.

Market Volatility and Correlations

The prices of investment instruments the Advisers trade on behalf of the Funds can be volatile during certain, perhaps prolonged, periods. For example, the prices of investment instruments held by the Funds may be sensitive to interest rate fluctuations and unexpected fluctuations in interest rates could cause the corresponding pricing of long and short positions to move in directions that were not initially anticipated. Market volatility creates the risk that positions held by the Funds may be highly unprofitable on an interim basis, even if over time they would ultimately be profitable. Under certain market conditions, the Advisers potentially may be forced to liquidate positions on behalf of the Funds, resulting in significant losses for the Funds.

A number of the trading and risk management models used by the Advisers make assumptions about near-term volatility and risks based upon historical patterns. Given the number of factors that can affect market volatility, such assumptions are inherently subjective and unreliable. The Funds may incur substantial trading losses, and the risk management models used by the Advisers may not function as designed if realized market volatility and correlations differ materially from the assumptions used, which could have a material adverse effect on the performance of the Funds.

Portfolio Turnover

The Advisers often invest on behalf of the Funds on the basis of short-term market considerations, and the mispricings or other criteria from which the Advisers seek profit for the Funds can be short-lived. The turnover rate of the Funds' positions may be significant, potentially involving substantial brokerage commissions, transaction fees, and clearing costs.

Global Market Exposure

Investments on a global basis in both developed and emerging markets involve the following risks, among other risks: (i) currency exchange-rate risk; (ii) the possible imposition of withholding, income, excise and other taxes; (iii) the absence of uniform accounting, auditing and financial reporting standards and practices, less rigorous disclosure requirements and little or potentially biased government supervision and regulation; (iv) the risk of terrorism and acts of war; and (v) economic and political risks, including market risks resulting from political instability or trade wars, expropriation, exchange controls and restrictions on foreign investment and repatriation of capital.

Public Health Risk

The Funds could be materially adversely affected by the widespread outbreak of infectious disease or other public health crises, such as the COVID-19 pandemic. As further described below, public health crises such as the COVID-19 pandemic, together with any containment or other remedial measures undertaken or imposed, could have a material and adverse effect on the Funds and their investments, including by (i) disrupting or otherwise materially adversely affecting the human capital, business operations or financial resources of the Advisers, the Funds, the Funds' counterparties, the issuers in which the Funds invest, and/or service providers to the Funds and (ii) severely disrupting global, national and/or regional economies and financial markets.

Public health crises and efforts to address them may result in (or, in the case of the COVID-19 pandemic, have already resulted in) any or all of the following: (i) the closure of offices or other businesses, including office buildings and other commercial venues, (ii) workforce, trade or travel disruptions or restrictions, (iii) increased volatility in securities prices, and (iv) a reduction in the availability and/or adverse changes in the terms of capital or leverage. Any of the foregoing could have a material adverse impact on the Funds, the Funds' investments, service providers and counterparties of the Fund and the Funds' ability to successfully achieve their investment objectives.

The extent of the impact of pandemics such as COVID-19 and other public health crises on the Funds and their investments will depend largely on future developments, including the severity, duration and spread of the outbreak throughout the world and the effect on the global economy

and the markets, issuers and instruments in which the Funds invest, all of which are highly uncertain and cannot be predicted.

Emerging Markets

Emerging market investing is subject to risks not generally applicable to investing in more developed economies, including inefficient clearing systems, inadequate regulatory, accounting and disclosure standards, the risk of government intervention, expropriation and/or confiscatory taxation. The Advisers generally believe that in emerging markets they have access to inferior information in comparison to that possessed by many local market participants. Emerging markets are also generally more vulnerable to periods of less liquidity and extreme volatility than more developed markets. In addition, when periods of stress occur in developed financial markets, emerging markets as a group may suffer material price declines and less liquidity. Such risks relating to the Advisers' emerging markets investing on behalf of the Funds could lead to substantial losses on one or more investments.

Liquidity

Market liquidity often falls in periods of market turmoil, dramatically increasing transaction costs for investors seeking to acquire or liquidate positions. Numerous hedge funds have incurred significant or total losses when attempting to liquidate positions during periods of extreme illiquidity, often when seeking to raise cash to meet margin calls issued by counterparties. In the event the Advisers were to seek to liquidate a Fund's portfolio positions in a period of poor liquidity, the Fund could experience substantial losses.

Short Positions

A short sale of an investment instrument entails the risk of an unlimited risk of loss as there is no limit on how much the market price of that investment instrument may increase before the short position is closed. As a result, short sales can result in significant losses to a Fund.

Under certain market conditions, a Fund might have difficulty purchasing investment instruments to meet its short sale delivery obligations. In addition, purchasing investment instruments to close out a short position in such investment instruments can itself cause the price of the investment instrument to rise further, increasing losses. Furthermore, the Advisers may prematurely be forced to close out a short position in a security if a lender of such security demands the return of the security sold short, or may be required to sell investment instruments on short notice in order to cover additional margin requirements of a lender if the price of a security underlying a short position suddenly rises in value. Risks of short selling are increased by actions aimed at creating "short squeezes" (e.g., increasing the price of specific securities for which there are known or perceived substantial short positions across the market, resulting in short sellers closing out their short positions in such securities at the demand of lenders or to curb further potential losses, which, in turn, further increases the price of the specific securities). Hedge funds that trade securities that are considered "meme stocks" may be particularly prone to short squeezes related to such stocks.

Short selling has from time to time been the subject of significant regulatory scrutiny as well as substantive regulation. Regulatory initiatives to increase the regulation of the financial markets are ongoing, and it is not possible to predict whether short-selling may be restricted, perhaps

permanently, in a manner materially adverse to certain of the investment strategies implemented by the Advisers on behalf of the Funds.

Hedging Risks

The Advisers, on behalf of the Funds, often hedge certain market or other risks inherent in the Funds' portfolios, but generally have no obligation to do so. The Advisers may use a variety of investment instruments for hedging on behalf of the Funds, the choice of which may turn out in retrospect to have failed to mitigate the risks as intended. Furthermore, the Advisers may choose to use dynamic hedging approaches which may ultimately fail to achieve the intended risk mitigation if the market experiences rapid changes in price, volatility or liquidity. The Advisers will not, in general, attempt to hedge all market or other risks inherent in the Funds' portfolios, and will hedge certain risks only partially, if at all. Such hedging decisions, if they fail to achieve the intended risk mitigation or fail to adequately mitigate the level of intended risk, could have a material adverse effect on the performance of the Funds.

Changing Market Conditions

Certain changes in market conditions, for example, a decrease in trading volume or liquidity in a particular market, could materially reduce a Fund's profit potential.

Differential Access to Information

The Advisers will execute transactions on behalf of the Funds with other market participants who may have superior information and market intelligence than the Advisers. From time to time, the Funds may incur substantial losses caused by an information disadvantage.

Reliance on the Integrity of Financial and Economic Reporting

A number of the investment strategies the Advisers employ on behalf of the Funds rely on the financial, economic and economic policy information made available by companies, governmental agencies, exchanges, consulting and research firms, and central banks. Data such as the financial performance and prospects for individual companies, measures of economic performance and sentiment reported by governmental agencies, and numerous other factors can have a material effect on the investment positions the Advisers take on behalf of the Funds. However, the Advisers have limited, if any, ability to independently verify such financial, economic and/or economic policy information. The Advisers are dependent in this regard upon the integrity of both the individuals and the processes by which the entities that publish such data produce their results. The Funds could incur material losses as a result of the misconduct or incompetence of such individuals and/or a failure of or substantial inaccuracy in such processes.

Reliance on Mortgage Underwriters and Servicers

The likelihood of mortgages being paid is based entirely on the payments being received on the underlying receivables. In assessing the quality of different mortgages, the Advisers are wholly dependent on information furnished by mortgage originators and servicers and certain mortgage originator and servicer information. The Advisers have limited, if any, ability to independently

verify such financial information they receive. Inaccurate information concerning the underlying mortgages can cause material loss to the Funds.

Rating Agency Uncertainty

Downgrading of issuers and/or investment instruments in which the Funds invest could lead to substantial losses, and the Advisers may not be able to rely with confidence on the ratings given to issuers in which the Advisers are considering investing on behalf of the Funds.

Leverage; Financing; Availability of Credit

A sub-fund may invest on a highly leveraged basis, and a Fund may leverage its investment into such a sub-fund. Leverage may be achieved in numerous ways, including through the issuance of debt securities, loans for borrowed money and the leverage embedded in derivative instruments. The amount of leverage at a sub-fund or a Fund may be large in relation to its capital. A Fund or sub-fund that uses leverage is generally not subject to any restrictions on the amount or type of leverage that the Advisers may use on its behalf. The Advisers will determine such leverage based on factors they deem relevant. The use of leverage can significantly magnify both gains and losses, increasing the possibility of a total loss of investment. The rights of lenders and debt holders to receive payments of interest or repayments of principal will generally be senior to those of the investors in a Fund.

Leverage achieved by a Fund or a sub-fund through margin borrowings requires such entity to post collateral with brokers and counterparties that provide it with financing. Brokers and counterparties have broad discretionary authority over valuation of a Fund's or a sub-fund's assets they hold, and the amount of collateral required. A broker or counterparty may have the right to (i) reduce the valuation of a Fund's or a sub-fund's assets it holds, including collateral posted on behalf of a Fund or a sub-fund; (ii) require additional collateral to be posted; and/or (iii) reduce unilaterally the credit extended to a Fund or a sub-fund for a number of reasons, including reasons that have no bearing on the creditworthiness of such Fund or such sub-fund. Any such action by a broker or counterparty could lead to a margin call on a Fund or a sub-fund or result in a Fund or a sub-fund having to sell assets at a time when such Fund or such sub-fund would not otherwise choose to do so. If a Fund or a sub-fund does not meet a margin call in accordance with the relevant financing agreement, the broker or counterparty may declare such Fund or such sub-fund in default and liquidate such Fund's or such sub-fund's assets held by the broker or counterparty.

The investment strategies employed by the Advisers on behalf of the Funds depend on the availability of credit in order to finance the Funds' portfolios. The credit available to the Funds or the sub-funds could be dramatically reduced for a significant length of time. A Fund's or sub-fund's inability to access secured and/or unsecured financing facilities and markets could significantly impact its profitability. Any or all of these situations could arise due to circumstances that the Advisers may be unable to control.

Borrowing and Lending Activities

The investment instruments of certain sub-funds are loaned to, borrowed from, pledged to and otherwise financed with third parties or other Funds. Third parties and other Funds that enter into

financing transactions with sub-funds may default on their obligations to return investment instruments or to otherwise pay amounts owed to the sub-funds. Such failures to receive the amounts that are owed to a sub-fund, either directly or indirectly, could have a material adverse effect on the performance of one or more Funds.

Counterparty and Credit Risk

There is a risk that prime brokers, counterparties, clearing houses or exchanges with which the Advisers deal on behalf of the Funds, including brokers and counterparties that are Citadel Related Parties, may default on their obligations to the Funds. Any default by any of such parties could result in material losses to the Funds.

Leveraged Exposure to Sub-Funds

Multiple Funds, including Funds owned solely or substantially by Citadel Related Parties, may invest in the same sub-funds and may use leverage in doing so. The allocations and reallocations of capital by the Funds, directly and indirectly, to and from such sub-funds could materially adversely affect the sub-funds and may be compelled by the terms of their leveraging arrangements. As a result of the possible application of different leverage terms to different groups of investors in a sub-fund, such sub-fund as a whole may be subject to liabilities relating to only one group of investors in such sub-fund. In addition, when making certain decisions on behalf of a sub-fund, including decisions related to the use of leverage by such sub-fund, the Advisers may consider the investment objectives and strategies of all of the Funds, including Funds owned solely or substantially by Citadel Related Parties, that invest in such sub-fund (as opposed to only the investment objective and strategies of such sub-fund or a particular Fund) as well as the allocation and reallocation of capital in and out of such sub-fund by such Funds.

The Advisers have arranged for certain of the sub-funds to make disproportionate allocations of their profits and losses to certain levered participants, which consist of Citadel Related Parties and entities in which such Citadel Related Parties have an interest. Such disproportionate allocations will cause the applicable sub-funds to use additional leverage in the course of their investment activities. This additional leverage will expose the sub-funds (and the applicable Funds) to additional risk, although only the levered participants will participate in the disproportionate allocations. If such sub-funds experience substantial losses, it is possible that losses attributable to the additional market exposure incurred in connection with such disproportionate allocations could deplete capital attributable to Funds that are not such levered participants.

Controlling Interests

In certain circumstances, a Fund or a sub-fund may be a controlling or significant shareholder of, or obtain a seat on the board of directors of, a company in which such Fund has invested. This may subject the Fund to a greater risk of litigation by third parties, reputational risk, and potential liabilities, including failures in connection with the management of the company, violations of governmental regulations (including securities laws) or other types of liability in which the limited liability generally characteristic of business ownership may be ignored. In the event that a Fund (or a representative or agent of such Fund) serves on the board of directors of a company, such Fund may be subject to claims regarding breaches of fiduciary and other duties.

Further, if a Fund holds a board seat on, owns a controlling or significant stake in, or is deemed an affiliate of a particular company, it may be subject to certain additional securities laws restrictions, which could affect both the liquidity of the Fund's interest and the Fund's ability to liquidate its interest without adversely impacting the stock price, including insider trading restrictions, the affiliate sale restrictions of Rule 144 of the 1933 Act and the disclosure requirements of Sections 13 and 16 of the Securities Exchange Act of 1934.

Creditors Committee

A Fund, or the Advisers on such Fund's behalf, may serve as a representative on creditors' committees, official or unofficial, equity holders' committees or other groups to seek preservation or enhancement of the Fund's position as a creditor or equity holder. In the event that a Fund, or the Advisers on its behalf, serves on an official creditors' committee, such Fund, or the Advisers on its behalf, will likely be deemed to have duties to other creditors represented by the committee, which may expose such Fund to potential liability to such other creditors who disagree with such Fund's or the Advisers' actions. If a Fund, or the Advisers on its behalf, joins a creditors' committee, the other participants on the committee may be interested in obtaining an outcome that is in their respective individual best interests and there can be no assurance of obtaining results in the best interests of the Fund in such proceedings. A Fund may also be provided with material non-public information that may restrict its ability to trade in the company's securities or be subject to other limitations on trading.

Investment Instrument Risks

Equity Securities

Certain of the Advisers' investment strategies involve investments in equity and equity-linked securities (including equity-based derivatives), the values of which vary with an issuer's performance and movements in the broader equity markets. Numerous economic factors, as well as market sentiment, political and other factors, influence the value of equities. At any given time, a Fund may have significant investments in companies with smaller market capitalizations. These securities often involve greater risks than the securities of larger, better-known companies, including less liquidity and greater volatility.

Debt Securities; Loans

Debt securities and loans, including convertible debt securities, may be subject to price volatility due to various factors including changes in interest rates, market perception of the creditworthiness of the issuer and general market liquidity. In addition to the sensitivity of debt securities and loans to overall interest rate movements, debt securities and loans involve a fundamental credit risk based on the issuer's or borrower's ability to make principal and interest payments on the debt it issues or loans it receives.

Sovereign Debt

The Advisers may invest in debt securities issued by G-10 countries on behalf of the Funds, including debt obligations issued or guaranteed by national, state or provincial governments,

political subdivisions or quasi-governmental or supranational entities. G-10 governments often intervene in the markets for their debt for a variety of economic and/or political reasons.

The Advisers may also invest in non-G-10 government debt securities on behalf of the Funds. Such securities may involve a high degree of risk and the issuing governmental entities may default on or restructure their obligations. Certain sovereign debt may have non-investment grade ratings or be in distress or even default. In addition, some developing countries may experience greater periods of economic uncertainty than developed countries, which may result in greater volatility of market prices of sovereign debt issued by developing countries than the volatility inherent in debt obligations of developed countries.

Currencies

The Funds may be subject to two types of exchange rate risk: the risk of speculative currency trading and the exchange rate risk inherent in investing in global investment instruments denominated in different currencies. The Advisers may invest in currencies on behalf of a Fund on a speculative basis. Currency trading involves positioning in anticipation of movements in exchange rates among countries. Exchange rates can change dramatically over short periods of time, particularly during times of political or economic unrest or as a result of actions taken by central banks, which may be intended directly to affect prevailing exchange rates.

Moreover, many of the investment instruments in which the Advisers invest on behalf of a Fund are denominated in currencies other than the U.S. dollar, and certain U.S. dollar-denominated investment instruments in which the Advisers invest on behalf of a Fund are convertible into investment instruments denominated in other currencies. The Funds holding these and other positions are subject to the risk that exchange rate movements will cause losses on positions which might otherwise have been profitable.

Metal-Related Investment Instruments

Investments in base as well as precious metal-related instruments, such as spot and forward futures contracts, may be volatile. The value of these instruments may fluctuate due to overall market movements and other factors, such as inflation fears, interest rate movements and international political events.

Derivative Instruments

The Advisers make extensive use of various derivative instruments on behalf of the Funds. These instruments typically involve highly leveraged exposure to underlying referenced assets from which such instruments derive their performance, at least in part. The use of derivatives involves a variety of material risks, including the possibility of counterparty non-performance as well as deviations between the actual and the theoretical value of such derivatives. Changes in the volatility of the price of an underlying security or index may make a large difference to the theoretical value of a derivative instrument. Derivatives are subject to a wide variety of contractual terms including a range of “early termination events” permitting the counterparty to liquidate the position prematurely. Derivatives may be extremely illiquid, and in many cases, derivative positions may be offset only by transacting with the counterparty to the derivative.

Options

The Advisers may buy or sell (write) both call options and put options on either a covered or an uncovered basis for a Fund. The value of options is materially affected by market volatility. If the Advisers were to incorrectly forecast near-term market volatility, such Funds may incur substantial losses on their options trading. The seller of an uncovered call option bears the risk of an increase in the market price of the underlying security above the exercise price, which risk is theoretically unlimited.

Futures

The Advisers may trade futures on behalf of a Fund in certain of their investment strategies. Futures are often inherently highly leveraged and can become illiquid due to exchange-imposed price fluctuation limits.

The regulation of futures trading on non-U.S. exchanges differs materially from that on U.S. exchanges, and the Advisers may have a significant competitive disadvantage to other market participants in trading on such exchanges.

The successful trading of futures for speculative purposes is subject to the ability to predict correctly movements in the direction of the relevant market and, to the extent the transaction is entered into for hedging purposes, to determine the correlation between the position being hedged and the price movements of the futures contract.

Physical Commodities Investing and Transportation

In certain investment strategies in which the Advisers may trade commodities on behalf of a Fund, the Advisers may generally seek to avoid taking or making delivery of underlying physical commodities. However, it is possible that a Fund may (either voluntarily or involuntarily) come into possession of physical commodities in connection with these investment strategies. In addition, certain Funds engage in certain businesses (e.g., the transportation and storage of natural gas) pursuant to which the Advisers expect to take or make delivery of underlying physical commodities on behalf of the Funds. The possession of physical commodities could subject a Fund to a variety of risks and costs not applicable to financial instruments, e.g., difficulty of transporting and storing, loss, damage, environmental damage and personal injury and associated liabilities, state and local sales tax and insurance. In addition, the business of transporting and storing physical commodities (e.g., natural gas) may expose a Fund to additional laws and regulations that would not otherwise apply to such Fund's trading of physical commodities.

Agricultural Commodities

The agricultural investment instruments in which the Advisers may trade on behalf of a Fund could have less liquidity than other commodities-related investment instruments, and the prices in such markets can be dominated by unexpected weather and political events, changes in consumer demand and public policy and the hedging transactions of large commercial users.

Credit Derivatives

The Advisers may purchase and sell credit derivatives on behalf of a Fund. Investments in credit derivatives are subject not only to the credit risk of the issuer of the underlying obligations to which such derivatives are referenced, but also to the credit risk of the counterparty to the credit derivative transaction itself. In certain cases, the credit derivatives market is significantly less liquid than the market in the underlying debt obligations, particularly if the derivative is highly customized and individually negotiated.

Energy-Related Investment Instruments and Markets

The Advisers may invest on behalf of a Fund in a wide range of energy and energy-related markets including natural gas, crude oil and refined products, power, coal, emissions, carbon and renewable energy credits, financial transmission rights and weather. The Advisers may invest on behalf of such Fund through physical and financial derivative instruments. The energy and energy-related markets are susceptible to significant short-term price volatility as a result of a variety of factors which are inherently unpredictable, such as extreme weather events and climate change, rate and tariff regulation, market design regulation, government ownership of certain major market participants, production decisions by state-owned energy companies, geo-political changes in certain non-U.S. regions, consumer advocacy, climate activism and the investment activity of market participants. The energy and energy-related markets are also subject to price volatility as a result of breakdowns in the facilities necessary to produce, refine, transport, store and deliver physical energy.

Because oil and natural gas are considered important natural resources, substantial profits earned through energy-related commodities trading have attracted significant regulatory, legislative and public scrutiny and likely will continue to do so.

Trading of physical energy contracts involves risks not typically present in the case of financial contract trading. The Advisers may be at a competitive disadvantage to some participants in the energy markets (for example, natural gas and oil companies) that produce some of the energy products they trade.

Financial transmission rights in the United States typically are traded in markets controlled by independent electric grid operators. If a market participant defaults, the direct financial cost of such default is allocated to market participants on a pro rata basis. As a participant in these markets, a Fund would be required to cover its pro rata share of such default allocations.

In addition, principal investments in equity securities and debt instruments of private companies in the commodities sector may be illiquid or otherwise subject to restrictions on transfer. As a result, a Fund may be limited in its opportunities to monetize such investments at favorable prices.

Credit Default Swaps

The Advisers may use credit default swaps on behalf of a Fund. Investing in credit default swaps involves different risks from investing in the reference obligation directly. In addition to general market risks, credit default swaps are subject to liquidity risk and, if uncleared, counterparty credit risk.

Given the fact that some of the credit default swap contracts that the Advisers enter into on behalf of the Funds are bilaterally settled rather than centrally cleared, settlement of such contracts may be delayed beyond the time frame originally anticipated by counterparties, and disputes may be more likely to arise as settlement is delayed. Such delays may adversely affect a Fund's ability to otherwise productively deploy capital that is committed with respect to such contracts.

Cryptocurrency Derivatives

The prices of derivative instruments, including futures, options, and similar instruments, are highly volatile. Payments made pursuant to swap agreements and similar instruments may also be highly volatile. A Fund may be engaged in the trading of bespoke derivative instruments based on cryptocurrencies that have characteristics similar to, but also distinct from, other types of derivative instruments deployed in traditional asset classes. As the value of a derivative depends largely upon price movements in the underlying asset, the risks applicable to trading underlying cryptocurrencies also affect the value of cryptocurrency derivatives. Accordingly, cryptocurrency derivatives may be subject to substantial price volatility.

The initial margin for such derivatives may be set as a percentage of the value of a cryptocurrency derivative contract, which could lead to significant increases in margin requirements for long positions if the contract's price rises. More leverage may be available for cryptocurrency derivatives than in traditional markets. The use of leverage by a Fund in a market that moves adversely to such Fund's investments could result in a loss to such Fund that would be greater than if leverage were not employed by such Fund. As a general matter, the prices of leveraged instruments can be highly volatile, and investments in leveraged instruments may, under certain circumstances, result in losses that exceed the amounts invested. As a result, a relatively small price movement in a futures contract may result in immediate and substantial losses to the trader.

Futures positions may be illiquid because certain commodity exchanges and cryptocurrency exchanges limit fluctuations in certain futures contract prices during a single day by regulations referred to as "daily price fluctuation limits" or "daily limits." Under such limits, during a single trading day, no trades may be executed at prices beyond the daily limits. Once the price of a particular futures contract has increased or decreased by an amount equal to the daily limit, positions in that contract can neither be taken nor liquidated unless traders are willing to effect trades at or within the limit. This could prevent the Advisers from promptly liquidating unfavorable positions and subject a Fund to substantial losses, especially during periods of high volatility. In addition, the Advisers may not be able to execute futures contract trades at favorable prices if little trading in the contracts involved is taking place. It is also possible that an exchange or regulatory authority may suspend trading in a particular contract, order immediate liquidation and settlement of a particular contract, or order that trading in a particular contract be conducted for liquidation only. Any such restrictions or halts would restrict a Fund's ability to exit a cryptocurrency derivative position during a period of increased volatility.

Certain commodity exchanges referred to as Designated Contract Markets ("DCMs") and cryptocurrency exchanges have also established limits, referred to as "position limits," on the maximum net long or net short positions which any person may hold or control in particular commodity futures contracts. The Advisers may need to modify their investment and trading

decisions for a Fund, and such Fund might need to liquidate positions, in order to avoid exceeding such limits. If this should occur, it could adversely affect such Fund's profitability.

DCMs or financial commission merchants ("FCMs") may impose other requirements or limitations on futures trading, including without limitation requiring additional margin for specific contracts, prohibiting naked shorting or prohibiting give-in transactions. These requirements or limitations may be more onerous with respect to cryptocurrency futures trading and could impair a Fund's trading activities.

There may be enhanced basis risk with respect to cryptocurrency futures. Because the spot cryptocurrency markets are continuously active on a 24/7 basis while the DCMs on which a Fund will trade futures are closed on weekends and market holidays (and will have fixed trading hours on open days), such Fund may be subject to enhanced basis risk compared to other types of investment vehicles that invest in futures in respect of traditional assets.

Due to the nature of cryptocurrencies, certain cryptocurrency derivatives may be programmed to execute automatically when certain conditions are met, using "smart contracts." Since smart contracts typically cannot be stopped or reversed, any adverse or unintended effects, such as uneconomic collateral liquidations, may be exacerbated.

Although cryptocurrency derivatives may be subject to the jurisdiction of the U.S. Commodity Futures Trading Commission (the "CFTC"), with respect to underlying or spot markets in cryptocurrencies, the CFTC's jurisdiction is limited to antifraud and manipulation enforcement, and the National Futures Association (the "NFA") does not have regulatory authority for underlying or spot market cryptocurrency products or transactions or cryptocurrency exchanges, custodians or markets.

Investments in cryptocurrency derivatives carry significant risk. A Fund may lose the value of its entire investment or part, or the entirety, of its investments in cryptocurrency derivatives. Cryptocurrencies are a relatively new asset class and the cryptocurrency market is still developing. Accordingly, the risks of cryptocurrency derivatives and using cryptocurrency exchanges may not be apparent and additional risks may present in the future, including without limitation the lack of regulatory certainty and the risk that regulatory authorities may impose new restrictions or take other actions which could have an adverse impact on cryptocurrencies, cryptocurrency derivatives and using cryptocurrency exchanges.

In addition, an investor should be aware that there is very limited authority on the U.S. tax treatment of cryptocurrencies. In particular, there is significant uncertainty as to the timing, character and the sourcing of income and gain from such investments. In addition, there is uncertainty as to the Funds' obligation and ability to comply with certain information reporting requirements relating to cryptocurrencies.

Differential Cash Flows on Related Positions

Certain of the Advisers' investment strategies may involve taking positions that combine investment instruments which are not margined on a marked-to-market basis, or if margined on a marked-to-market basis, are subject to unilateral margin in favor of the counterparty, and related or hedging positions on the same or similar investment instruments but which are margined on a

bilateral marked-to-market basis. Due to the cash flow imbalances between such investment instruments, in extreme market scenarios, the Advisers may be forced to close out such positions on behalf of the Funds, perhaps at disadvantageous prices.

Interest Rate Risks

The prices of investment instruments may be sensitive to interest rate fluctuations and unexpected fluctuations in interest rates could cause the corresponding pricing of long and short positions to move in directions which were not initially anticipated. In addition, interest rate increases generally will increase the interest carrying costs of borrowed investment instruments as well as the cost of the leverage used by the Advisers on behalf of the Funds. To the extent that interest rate assumptions underlie the thesis of a particular position, fluctuations in interest rates could invalidate those underlying assumptions and expose the Funds to losses.

Distressed and High-Yield Investment Instruments

The Advisers may invest in investment instruments on behalf of a Fund that are issued by companies in weak and/or deteriorating financial condition, experiencing poor operating results, needing substantial capital investment, perhaps having negative net worth, facing special competitive or product obsolescence problems or involved in bankruptcy or reorganization proceedings. Investments of this type may involve substantial financial and business risks, which are often heightened by an inability to obtain reliable information about the issuers. Such investments can result in significant or even total losses. In addition, the markets for distressed and high yield investment instruments are frequently illiquid.

The market prices of distressed and high-yield investment instruments are subject to abrupt and erratic market movements and above-average price volatility, and the spreads between the bid and ask prices of such investment instruments may be greater than those prevailing in other markets. It may take a number of years for the market price of such investment instruments to reflect their intrinsic value.

In liquidations and corporate reorganizations, there exists the risk that the liquidation or reorganization will be unsuccessful, will be delayed, or will result in a distribution of cash or a new investment instrument that is worth less than what a Fund paid for its original investment. Distressed investment instruments also may be adversely affected by U.S. state and federal laws relating to, among other things, fraudulent transfers and other voidable transfers or payments and lender liability, as well as the bankruptcy court's power to disallow, reduce, subordinate, or disenfranchise particular claims.

Investments by a Fund in companies with weak and/or deteriorating financial conditions or that are involved in bankruptcy or reorganization proceedings may, at times, require participation in business strategy or reorganization proceedings by the Advisers, on behalf of such Fund. Involvement in a company's reorganization proceedings could result in the imposition of restrictions limiting a Fund's ability to liquidate its position in the securities or other instruments of the company. In addition, reorganizations can be contentious and adversarial and may subject the Funds or the Advisers to reputational risk. It is not unusual for participants to use the threat of, as well as actual, litigation or discovery as a negotiating technique. The Advisers and the Funds

may be named as defendants in civil proceedings or may become subject to discovery, and the Funds may be required to bear the expense of defending against claims by third parties and paying any amounts pursuant to settlements or judgments.

Mortgage-Backed Securities

The Advisers, on behalf of a Fund, may invest in mortgage-backed securities (“MBS”). MBS are securities that entitle the holders to receive payments that depend primarily on the cash flow from a specified pool of mortgage assets, either fixed or revolving, that by their terms convert — if paid in accordance with their tenor — into cash within a finite time period, together with rights or other assets designed to assure the servicing or timely distribution of proceeds to holders of the MBS.

Holders of MBS bear various risks, including liquidity risks, interest rate risks, market risks, operations risks, structural risks and legal risks. The structure of an MBS and the terms of the investors’ interest in the collateral can vary widely depending on the type of collateral, the desires of investors and the use of credit enhancements. Although the basic elements of all MBS are similar, individual transactions can differ markedly in both structure and execution. Important determinants of the risk associated with issuing or holding the securities include the process by which principal and interest payments are allocated and distributed to investors, how credit losses affect the issuing vehicle and the return to investors in such MBS, whether collateral represents a fixed set of specific assets or accounts, whether the underlying collateral assets are revolving or closed-end, under what terms (including the maturity of the MBS itself) any remaining balance in the accounts may revert to the issuing entity and the extent to which the entity that is the actual source of the collateral assets is obligated to provide support to the issuing vehicle or to the investors in such MBS.

Convexity and the Limits of Agency MBS Hedging

Hedging prepayment risk is complicated by the feature of many MBS known as “negative convexity.” If a Fund is hedged for a particular anticipated duration, the Fund may incur losses regardless of the market direction. For example, if a bond is anticipated to have a five-year duration, but interest rates fall and prepayments rise, then the actual duration of the bond may turn out to be shorter. If the Fund has sold a five-year duration “hedge” against this position, the Fund may wind up over-hedged and may lose more on the hedge than can be made on the target bond. Conversely, if interest rates rise and prepayments slow, causing the life of a bond to extend, the Fund may find itself under-hedged and may lose more on the bond than the gains on its hedge.

Agency Risk

Certain agency MBS may have lower credit risk, especially after the government “takeover” of the agencies. However, political action or other unpredictable events may lead to at least certain agency MBS, even if ultimately paid, not being paid promptly.

Residential Mortgage-Backed Securities (“RMBS”)

The Advisers may invest in RMBS on behalf of a Fund. Holders of RMBS bear various risks, including credit risks, liquidity risks, interest rate risks, market risks, operational risks, structural

risks and legal risks. Credit risk is an important issue in RMBS because of the significant credit risks inherent in the underlying collateral and because issuers are primarily private entities.

Due to the increasing or decreasing likelihood of prepayments resulting from changes in interest rates and other factors, mortgages have an unknown maturity. In the absence of a known maturity, market participants generally refer to an estimated average life. An average life estimate is based on an assumption regarding anticipated prepayment patterns, which are based on the estimation of future mortgage rates, current conditions in the relevant end use markets and other factors. The assumption is necessarily subjective and there can be no assurance that estimated average life will correspond to the actual average life.

The adverse effects of prepayments may impact a Fund's portfolio in two ways. First, particular investments may experience outright losses, as in the case of an interest-only security in an environment of faster actual or anticipated prepayments. Second, particular investments may underperform relative to hedges that the Advisers may have constructed for these investments, resulting in a loss to a Fund's overall portfolio. In particular, prepayments (at par) may limit the potential upside of many RMBS to their principal or par amounts, whereas their corresponding hedges often have the potential for unlimited loss.

RMBS are subject to a number of risks unrelated to whether the underlying mortgages are paid. For example, RMBS structures often incorporate swaps and other derivatives which are subject to counterparty risk. In addition, the entities in charge of servicing the underlying mortgages could result in defaults on payments on the RMBS despite the underlying mortgages themselves being paid. The RMBS securities themselves generally involve a "liquidity provider" in order to accommodate mismatches between the payment flows on the mortgages and on the RMBS themselves. These liquidity providers may default, or may be entitled to terminate or materially increase the expense of such facilities, impairing payment on the RMBS.

"Non-agency" RMBS are generally subject to additional risks in comparison with other RMBS. Non-agency RMBS are often backed by non-conforming mortgage loans (i.e., mortgage loans that do not qualify for purchase by government-sponsored agencies, such as Fannie Mae and Freddie Mac, because of credit characteristics). Accordingly, such mortgage loans are likely to experience higher rates of delinquency, foreclosure and loss than mortgage loans originated in accordance with Fannie Mae or Freddie Mac underwriting guidelines.

In the case of non-U.S. mortgages, the RMBS will be subject to exchange rate risk and/or the expense of exchange rate hedging which can materially reduce the amounts available to make payments on the RMBS.

Collateralized Debt Obligations ("CDOs")

The Advisers may invest in CDOs on behalf of a Fund. CDOs, in the context of a Fund's operations, are pools of mortgages, the cash flows of which are divided up into different senior as well as subordinated tranches.

The CDOs in which a Fund may participate involve substantial organizational, syndication and ancillary fees. A Fund's investment in CDOs may frequently be subordinate in right of payment to other securities sold by the CDO and not readily marketable. Depending upon the default rate

on the collateral of the CDO, the Fund may incur substantial losses on its CDO investments. In addition, when the Advisers, on behalf of a Fund, sell securities or assets held by the Fund to a CDO, the Fund may not receive any residual interest in such CDO so that any profits that the Fund might have recognized on such securities or assets will no longer inure to the benefit of the Fund.

CDOs are subject to credit, liquidity and interest rate risks. In particular, investment-grade CDOs may have greater liquidity risk than investment-grade governmental or corporate bonds. There is no established, liquid secondary market for many of the CDOs that the Advisers, on behalf of a Fund, may purchase. The lack of such an established, liquid secondary market may have an adverse effect on the market value of such CDOs and the Advisers' ability to sell them on behalf of the Fund. Further, CDOs may be subject to certain transfer restrictions that may further restrict liquidity. Therefore, no assurance can be given that if a Fund wished to dispose of a particular CDO, it could dispose of such an investment at the prevailing market price.

The performance of CDOs may be adversely affected by macroeconomic factors, including: (i) general economic conditions affecting capital markets and participants therein; (ii) the economic downturns and uncertainties affecting economies and capital markets worldwide; (iii) recent concern about financial performance, accounting and other issues relating to various publicly traded companies; and (iv) recent and proposed changes in accounting and reporting standards and bankruptcy legislation.

CDO structures are complex and evolving; a Fund may be subject to a number of as yet unanticipated risks in participating in CDOs (both in the case of CDOs sponsored by the Advisers and by third parties).

Lender Liability Considerations; Equitable Subordination

In recent years, a number of judicial decisions in the United States have upheld the right of borrowers to sue lenders or bondholders on the basis of various evolving legal theories (commonly referred to as "lender liability"). Generally, lender liability is founded upon the premise that an institutional lender or bondholder has violated a duty (whether implied or contractual) of good faith and fair dealing owed to the borrower or issuer or has assumed a degree of control over the borrower or issuer resulting in the creation of a fiduciary duty owed to the borrower or issuer or its other creditors or stockholders.

In addition, under common law principles that in some cases form the basis for lender liability claims, if a lender or bondholder: (i) intentionally takes an action that results in the undercapitalization of an obligor to the detriment of other creditors of such obligor; (ii) engages in other inequitable conduct to the detriment of such other creditors; (iii) engages in fraud with respect to, or makes misrepresentations to, such other creditors; or (iv) uses its influence as a lender or bondholder to dominate or control an obligor to the detriment of such creditors, a court may elect to subordinate the claim of the offending lender or bondholder to the claims of the disadvantaged creditor or creditors, which remedial action is called "equitable subordination." Because of the nature of CDOs, a Fund may be subject to claims from creditors of an obligor that debt obligations issued by such obligor that are held by such Fund should be equitably subordinated.

Structured Investment Products

The Advisers may, on behalf of a Fund, issue, acquire or otherwise participate in a variety of different structured investment products; for example, total return swaps, participating notes, options, collateralized loan obligations and CDOs. These structured products involve not only the risks of the underlying “reference assets,” but also the risks (including acceleration of the financing embedded in the structure and/or restrictions imposed on the management and nature of the permissible reference assets) and costs of creating the structured products. In addition, investments in collateralized loan obligations and CDOs are complex and are subject to a number of risks related to, among other things, changes in interest rates, the rate of defaults and recoveries in the collateral pool, pre-payment rates, the exercise of remedies by more senior tranches, the exercise of rights by junior tranches, and the possibility that no market will exist when the Funds seek to sell their interests in collateralized loan obligations or CDOs.

Private Investments in Public Equity

Certain Funds invest in private investments in public equity (“PIPEs”). PIPE transactions may involve the sale of common stock, convertible preferred stock, convertible debentures, warrants, or other equity or equity-like securities of an already-public company. In a PIPE transaction, a Fund may bear the price risk from the time of pricing until the time of closing. Generally, in a PIPE transaction, the Fund would enter into a definitive purchase agreement with the company in which it commits to purchase securities at a fixed purchase price and the issuer would not be obligated to deliver additional securities to the Fund in the event of fluctuations in stock price or otherwise. In a PIPE transaction, a Fund may have to commit to purchase a specified number of shares at a fixed price, with the closing conditioned upon, among other things, the SEC’s preparedness to declare effective a resale registration statement covering the resale from time to time of the shares sold in the private placement. A Fund’s ability to dispose of securities acquired in PIPE transactions may depend upon the registration of the resale of the acquired securities. Any number of factors may prevent or delay a proposed registration, or limit the number of securities which can be registered, and once effective there can be no assurance that the registration will remain in effect. While it may be possible for securities acquired in a PIPE transaction to be resold in transactions exempt from registration in accordance with Rule 144 of the 1933 Act or otherwise under the U.S. federal securities laws, the availability of this alternative can be (i) significantly limited where the Fund’s ownership of securities of the issuer, or its relationship with the issuer, could result in the Fund being considered an affiliate of the issuer or (ii) delayed where the issuer is not current in its public information reporting requirements. As a result, a Fund may not be able to liquidate PIPE securities quickly, and the delay in the opportunity to sell such securities could expose the Fund to the risk of a lower available market price when the Fund has the ability to sell the securities.

Special Purpose Acquisition Companies

Certain Funds invest in special purpose acquisition companies (“SPACs”), publicly traded companies formed for the purpose of raising capital through an initial public offering to fund the acquisition, through a merger, capital stock exchange, asset acquisition or other similar business combination, of one or more operating businesses. Following the acquisition of a target company, a SPAC typically would exercise control over the management of such target company in an effort

to increase the value of such target company. Capital raised through the initial public offering of securities of a SPAC is typically placed into a trust until the target company is acquired or a predetermined period of time elapses. Investors in a SPAC would receive a return on their investment in the event that a target company is acquired and such target company's value increased. In the event that a SPAC is unable to locate and acquire target companies by the deadline, the SPAC would be forced to liquidate its assets, which may result in losses due to the expenses and liabilities of the SPAC. Investors in a SPAC are subject to the risk that, among other things, (i) such SPAC may not be able to locate or acquire target companies by the deadline, (ii) assets in the trust may be subject to third-party claims against such SPAC, which may reduce the per share liquidation price received by the investors in the SPAC, (iii) such SPAC may be exempt from the rules promulgated by the SEC to protect investors in "blank check" companies, such as Rule 419 promulgated under the 1933 Act, so that investors in such SPAC may not be afforded the benefits or protections of those rules, (iv) such SPAC may only be able to complete one business combination, which may cause it to be solely dependent on a single business, (v) the value of any target company may decrease following its acquisition by such SPAC, (vi) the value of the funds invested and held in the trust decline, (vii) the inability to redeem due to the failure to hold the securities in the SPAC on the record date or the failure to vote against the acquisition and (viii) if the SPAC is unable to consummate a business combination, public stockholders will be forced to wait until the deadline before liquidating distributions are made. In addition, to the extent that a SPAC completes a business combination, it may be affected by numerous risks inherent in the business operations of the acquired company or companies.

Private Securities

Certain of a Fund's investments may involve private securities, which are generally more difficult to sell than publicly traded securities, as there is often no liquid market, which may result in selling interests at a discount. In addition, private securities generally are more difficult to value than publicly traded securities as such valuations are inherently uncertain.

Regulatory Risks

Potential Adverse Changes in Laws, Rules or Regulations

The investment and other activities conducted by Citadel Advisors and the Funds are heavily regulated, both in the United States as well as in other countries. Because of the heavily-regulated nature of Citadel Advisors' business and the investment activities in which the Funds engage, Citadel Advisors and the Funds are particularly sensitive to potential changes in laws, rules or regulations. At any given time, there may be various proposals before federal, state or foreign legislative bodies, financial market regulators or tax authorities, or proposals by candidates for elected office, that would purport to make significant changes to market structure, introduce new or increased restrictions, or otherwise increase regulatory or tax obligations, on firms in the financial services industry. These proposals may be driven by a number of factors, including (but not limited to) regulatory or legislative responses to market events, changes in regulatory,

legislative or public priorities or attitudes, or changes resulting from the outcome of national or state elections.

Membership on Exchanges and/or in Clearing or Self-Regulatory Organizations

In an effort to facilitate the investment strategies employed by the Advisers on behalf of the Funds, certain of the sub-funds and/or their affiliates have become and/or may become members of exchanges, clearing houses and other self-regulatory organizations and have obtained or will obtain a variety of governmental licenses or authorizations. Such memberships, licenses or authorizations subject such affiliates, the Funds and the relevant sub-funds to a wide range of regulation and other obligations, including regulatory inspections and other restrictions, together with associated costs.

Exchanges, clearing houses and other self-regulatory organizations regularly revise and interpret their rules, and such revisions and interpretations could materially adversely affect the Advisers' activities on behalf of certain sub-funds.

Government Intervention; Market Regulation

Market disruptions like those experienced in 2008 have led to increased governmental as well as regulatory scrutiny of the "hedge fund" industry in general. There have been certain well-publicized incidents of regulators unexpectedly announcing regulatory changes or interpretations or suddenly and substantially eliminating market participants' ability to continue to implement certain investment strategies or manage the risk of their outstanding positions that had been implemented in a variety of formats for many years. In addition, certain of these interventions have been unclear in scope and application, resulting in confusion and uncertainty which in itself has been materially detrimental to the efficient functioning of the markets as well as previously successful investment strategies. Many jurisdictions have imposed restrictions and reporting requirements on short selling. In March 2020 many countries introduced short selling bans in response to the market volatility resulting from the COVID-19 pandemic. In addition, the European Securities and Markets Authority reduced the threshold at which net short positions must be disclosed to national competent authorities in the E.U. Even in the United States, the SEC has in the past suspended short selling (including, for example, in response to the 2008 global financial crisis) and in 2010, the SEC adopted a short sale price test rule, which limits short selling an issuer following a 10% decline in a security's trading price. These restrictions and reporting requirements, and any restrictions and reporting requirement enacted in the future, may have the effect of making short-selling more difficult or costly, may cause unexpected and volatile increases in the equities prices of a variety of issuers, and may increase governmental and regulatory scrutiny of the financial industry in general.

Under the European Union ("E.U.") Alternative Investment Fund Managers Directive, the Advisers will only be permitted to actively market the Funds in the E.U. if certain disclosure and reporting obligations are met, and certain cooperation arrangements with the domicile of the Funds and/or the Advisers, are in place.

It is difficult to predict what other changes may be instituted in the future in the regulation of the Funds, the Advisers, the markets in which the Advisers invest on behalf of the Funds, or the

counterparties with which the Advisers do business on behalf of the Funds, in addition to those changes already proposed or adopted in the United States, the E.U. or other jurisdictions, and the impact of such changes. Any such regulation could negatively impact the strategies in which the Advisers engage on behalf of the Funds, increase costs borne by the Funds or otherwise have a material adverse effect on the Funds.

Regulation of OTC Derivatives Markets

Regulators, on a global basis, have implemented new regulations that directly and indirectly affect the OTC derivatives markets, including reporting, clearing, trading, capital, and margin requirements. In particular, requirements governing the posting of initial margin for non-centrally cleared OTC derivative contracts have and will continue to come into force in the dealer-to-customer market. Further, the interplay and cumulative impact of these regulations on the OTC derivatives market structure, pricing, and liquidity, among other aspects, remains uncertain, and could potentially be materially adverse to the Funds.

Accounting Changes Could Materially Adversely Affect Certain Investment Strategies

Various accounting changes may be implemented and/or proposed which could significantly impact the accounting for investment instruments in which the Advisers invest on behalf of the Funds. Any such actual or proposed changes could materially adversely affect certain of the investment strategies employed by the Advisers on behalf of the Funds.

Risks Related to Citadel Clearing

Use of Citadel Clearing to Provide Clearing Services

Citadel Clearing LLC, a broker-dealer registered with the SEC and a member of FINRA, provides securities clearing, securities settlement, financing, custody, and other related services (“Clearing Services”) to certain Funds (the “Citadel Clearing Funds”). The Citadel Clearing Funds substantially own Citadel Clearing (as defined below) and may, from time to time, pay clearing costs to Citadel Clearing for Clearing Services that are greater than would be incurred if an unrelated party were used to provide such Clearing Services.

Broker-dealers are subject to extensive regulation by the federal and state authorities and by the self-regulatory organizations of which they are members. Citadel Clearing’s failure to comply with any laws, rules or regulations applicable to it could subject it to penalties, which may have a material adverse effect upon Citadel Clearing and the Citadel Clearing Funds. Failure to comply with any of these laws, rules or regulations could lead to adverse consequences, including fines, the requirement of an infusion of additional capital or limitations on trading or other business activities. Any of these adverse consequences could have a material adverse effect on Citadel Clearing and in turn, the Citadel Clearing Funds. Without limiting the generality of the foregoing, as a registered broker-dealer and member of FINRA, Citadel Clearing LLC is subject to the net capital rules of the SEC, which require that at least a minimum part of a registered broker-dealer’s assets be kept in relatively liquid form. There is a material risk that regulators could further increase these capital requirements. In addition, Citadel Clearing is a member of clearinghouses that may increase the required cash or other assets that Citadel Clearing must deposit with the clearinghouses on limited notice. A change in the net capital rules, the imposition of new rules or

any unusually large charges against net capital could limit Citadel Clearing's operations, and could have a material adverse effect on the Citadel Clearing Funds.

Should Citadel Clearing require more capital, the Citadel Clearing Funds will likely be required to make additional capital contributions, or increase the size of their loan, to Citadel Clearing Holdco (as defined below), which will increase the percentage of the Citadel Clearing Funds' assets invested in Citadel Clearing and will reduce the liquidity of the Citadel Clearing Funds' portfolio. Should the Advisers determine not to increase the amount of capital contributed by the Citadel Clearing Funds to Citadel Clearing, Citadel Clearing may be unable to continue its business and may be forced to liquidate or reduce its business.

Illiquidity

The Citadel Clearing Interest (as defined below) is illiquid. There is no market for the Citadel Clearing Interest and none is expected to develop. As such, investors in the Citadel Clearing Funds should expect that the Citadel Clearing Funds will be required to maintain a minimum loan obligation with respect to Citadel Clearing Holdco until maturity, and will likely be unable to sell its portion of the equity in Citadel Clearing Holdco.

The Citadel Clearing Funds used a portion of their unencumbered cash to fund the Citadel Clearing Interest. Although the Citadel Clearing Funds continue to hold a significant portion of their assets as unencumbered cash, having less unencumbered cash available may reduce the Citadel Clearing Funds' ability to meet other obligations in times of market stress.

Furthermore, the Advisers could cause the Citadel Clearing Funds to contribute additional capital, or increase the size of their loans, to Citadel Clearing Holdco. A material increase in the amount of capital allocated by the Citadel Clearing Funds to Citadel Clearing Holdco could further reduce the unencumbered cash held by the Citadel Clearing Funds and increase the illiquidity of the Citadel Clearing Funds' portfolios, which could have a material adverse effect on the Citadel Clearing Funds.

Risk of Loss

Citadel Clearing's primary source of net income results from Clearing Services provided to the Citadel Clearing Funds. In addition, there are costs associated with maintaining the systems and personnel required to operate Citadel Clearing, which may increase over time.

The Citadel Clearing Funds, as the primary equity and debt holders of Citadel Clearing Holdco, are subject to the risk that they may lose some or all of their capital contributed and/or loaned to Citadel Clearing Holdco. The Citadel Clearing Interest is periodically reallocated by the Advisers among the Citadel Clearing Funds based on each Citadel Clearing Fund's utilization of the Clearing Services, as determined in the Advisers' discretion. However, the Advisers will not be able, and will have no obligation, to reallocate the Citadel Clearing Interest among the Citadel Clearing Funds based on relative usage on a real time basis. As such, there are likely to be periods of time when a Citadel Clearing Fund's allocable portion of the Citadel Clearing Interest in Citadel Clearing Holdco is disproportionate to such Citadel Clearing Fund's relative usage of the Clearing Services.

Ramification of Termination of the Loan

The loan by the Citadel Clearing Funds to Citadel Clearing Holdco has a fixed term and provides for automatic renewals for additional terms, unless a Citadel Clearing Fund notifies Citadel Clearing Holdco otherwise within a certain period of time prior to maturity of the initial or such additional term. Should the Citadel Clearing Funds elect not to renew the loan for an additional term, the Citadel Clearing Funds will likely need to move their accounts to another clearing broker. In addition, the ability of Citadel Clearing to provide Clearing Services to the Citadel Clearing Funds is dependent upon the loan from the Citadel Clearing Funds. In the event that one or more Citadel Clearing Funds determine not to renew the loan, unless Citadel Clearing is able to obtain capital from another source, Citadel Clearing may be required to wind down or provide less extensive Clearing Services, in which case the Citadel Clearing Funds will be required to obtain these Clearing Services from other broker-dealers. The fees and other costs charged by such other broker-dealers may be higher than those charged by Citadel Clearing for the same services, and the terms of such services may be less favorable than those provided by Citadel Clearing.

Dependence on Other Citadel Clearing Funds

Citadel Clearing's primary source of net income results from Clearing Services provided to the Citadel Clearing Funds. In the event that the Advisers determine that a Citadel Clearing Fund should cease to use Citadel Clearing's Clearing Services, the net income received by Citadel Clearing will be reduced. Further, the dissolution of a Citadel Clearing Fund may reduce the net income received by Citadel Clearing. This may decrease the likelihood that Citadel Clearing Holdco will be able to service its ongoing obligations. In addition, this may require the remaining Citadel Clearing Funds to contribute additional capital, or increase the size of their loans, to Citadel Clearing Holdco.

Without limiting the generality of the foregoing, one or more Citadel Clearing Funds may have insufficient capital to make a needed capital contribution, or a loan payment, to Citadel Clearing Holdco. In such event, the other Citadel Clearing Funds may be required to contribute more capital, or make larger loan payments, than they otherwise would have. In the event that one or more Citadel Clearing Funds are unable to meet these obligations, Citadel Clearing may default on its obligations, become insolvent and/or be required to liquidate.

Counterparty Risk

The success of Citadel Clearing is based on the willingness of counterparties to conduct business with Citadel Clearing. No assurance can be provided that counterparties will continue to be willing to transact with Citadel Clearing.

In addition, Citadel Clearing is subject to the risk that the counterparties with which it deals, including some of the Citadel Clearing Funds, may default on their obligations to Citadel Clearing. Any default by any of such parties could result in material losses to Citadel Clearing.

Risks Related to Citadel Futures Clearing

Citadel Futures Clearing

Citadel Futures Clearing LLC (“Citadel Futures Clearing”), an FCM, provides futures clearing and related services (“Futures Clearing Services”) to a sub-fund (the “CFC Sub-Fund”) owned by certain of the Funds (together, the “Citadel Futures Clearing Funds”). Citadel Futures Clearing is wholly owned by the CFC Sub-Fund.

FCM Requirements; Clearing House Risks

While not required to register with the NFA as an FCM, Citadel Futures Clearing is subject to limited oversight by certain regulatory authorities and is required to comply with certain laws, rules and regulations. The failure of Citadel Futures Clearing to comply with any such laws, rules or regulations, including the exemption from FCM registration on which Citadel Futures Clearing relies, could lead to adverse consequences, including fines, cease and desist orders, additional costs, the requirement of an infusion of additional capital or limitations on trading, clearing or other business activities, which, in turn could have a material adverse effect on the Citadel Futures Clearing Funds.

It is expected that Citadel Futures Clearing will be a member of one or more clearing houses. The success of Citadel Futures Clearing will be based on the terms on which clearing houses are willing to offer membership to and conduct business with Citadel Futures Clearing. No assurance can be provided that a clearing house will continue to offer economically viable terms or be willing to transact with Citadel Futures Clearing, or that Citadel Futures Clearing will be able to maintain membership in any such clearing houses.

As a futures clearing house member, Citadel Futures Clearing will become subject to minimum capital requirements, default fund contributions and margin posting, as determined by the relevant clearing house. There is a risk that a futures clearing house could increase materially, and on limited notice, one or more of those capital, default fund and margin requirements, and impose assessments on non-defaulting clearing members in the event of a default by another clearing member. The CFC Sub-Fund will guarantee all of, and each Citadel Futures Clearing Fund, severally and not jointly, may guarantee its pro rata portion of, Citadel Futures Clearing’s obligations to one or more clearing houses, including obligations to fund all of the foregoing. As such, any such increase in capital, default fund or margin requirements, or imposition of an assessment could limit Citadel Futures Clearing’s operations, and have a material adverse effect on the CFC Sub-Fund and the Citadel Futures Clearing Funds.

Third-Party FCMs

Customer accounts maintained by third-party registered FCMs receive certain benefits and protections that will not be available to the CFC Sub-Fund when utilizing Citadel Futures Clearing, e.g., Citadel Futures Clearing is not required to and will not segregate margin deposited by the CFC Sub-Fund from its own funds. Given the parent-subsidiary relationship between the CFC Sub-Fund and Citadel Futures Clearing and the guarantee provided by the CFC Sub-Fund, any such margin segregation would be unlikely to provide the CFC Sub-Fund with the protection equivalent to that provided by a third-party FCM.

Capital Infusions; Illiquidity

The interest held by the CFC Sub-Fund in Citadel Futures Clearing, which may be in the form of debt and/or equity (the “Citadel Futures Clearing Interest”), is illiquid. There is no market for the Citadel Futures Clearing Interest and none is expected to develop. As such, investors should expect that the CFC Sub-Fund will likely be unable to fully recover the capital contributed by it to Citadel Futures Clearing until the liquidation of the Citadel Futures Clearing Interest.

Should Citadel Futures Clearing require more capital, the CFC Sub-Fund will likely be required to make additional capital contributions, which will increase the percentage of the Citadel Futures Clearing Funds’ assets allocated to Citadel Futures Clearing and reduce the liquidity of the Citadel Futures Clearing Funds’ portfolio. Should Citadel Advisors determine not to increase the amount of capital contributed by the CFC Sub-Fund to Citadel Futures Clearing, Citadel Futures Clearing may be unable to continue providing Futures Clearing Services and may be forced to liquidate or reduce the Futures Clearing Services it provides, which could have a material adverse effect on the Citadel Futures Clearing Funds.

In addition, any redemption by certain Citadel Futures Clearing Funds from the CFC Sub-Fund (whether to fulfil redemptions, in connection with a reallocation of its assets among various strategies, in connection with a dissolution or otherwise) will increase the equity interest in Citadel Futures Clearing that is indirectly held by the other Citadel Futures Clearing Fund(s). This will, in turn, increase the illiquidity of such other Citadel Futures Clearing Fund’s portfolio.

Expenses; Risk of Loss

As the sole owner and client of Citadel Futures Clearing, the CFC Sub-Fund will incur various costs and expenses, and will be subject to potential liabilities, in connection with the establishment and operation of Citadel Futures Clearing, including costs associated with personnel and system maintenance. These expenses may increase over time. Because the CFC Sub-Fund is the only client of Citadel Futures Clearing, Citadel Futures Clearing will not receive the benefit of income from third-party clients to offset these expenses. In addition, the CFC Sub-Fund will guarantee all of, and each Citadel Futures Clearing Fund, severally and not jointly, may guarantee its pro rata portion of, Citadel Futures Clearing’s obligations to one or more clearing houses. As such, the CFC Sub-Fund may incur substantial losses and liabilities in connection with owning and utilizing the Futures Clearing Services provided by Citadel Futures Clearing, which may have a material adverse effect on the Citadel Futures Clearing Funds.

The CFC Sub-Fund may incur more costs and liabilities associated with establishing and utilizing Citadel Futures Clearing than it would have incurred had it instead utilized third-party registered FCMs for futures clearing services. No assurance can be provided that the benefits to the CFC Sub-Fund of utilizing a wholly owned FCM for Futures Clearing Services will outweigh the costs, liabilities and losses of protections associated therewith.

In addition to Citadel Futures Clearing, Citadel may in the future establish one or more FCMs owned by other sub-funds to provide Futures Clearing Services or similar services to such sub-funds.

Item 9 – Disciplinary Information

The Advisers have no information to report with respect to this item.

Item 10 – Other Financial Industry Activities and Affiliations

Investment Advisers

As described in Item 4—Advisory Business, Citadel Europe, Citadel Asia, Citadel France and Citadel Singapore are relying advisers of Citadel Advisors. Citadel Europe, Citadel Asia, Citadel France and Citadel Singapore provide investment advisory services in connection with the Advisers’ management of the Funds.

Broker-Dealers

The Advisers have related persons that are broker-dealers. Certain of these broker-dealers are owned by the Funds while the other broker-dealers are owned by affiliates of the Advisers. The Advisers and their affiliates may earn fees and receive other benefits when the Funds transact with and use the services of these broker-dealers. In addition, certain of the persons who are registered representatives of the Advisers’ related broker-dealers are management persons of the Advisers.

Citadel Securities

Citadel Securities LLC, a part of Citadel Securities, is a broker-dealer registered with the SEC and a member of FINRA. Although Citadel and Citadel Securities generally operate independently with separate investment personnel, they both utilize the infrastructure and support provided by Citadel Enterprise and share other resources and non-investment personnel.

Citadel Group has established certain policies, including certain information barriers, between Citadel and Citadel Securities that are designed to mitigate and reduce the number of potential conflicts of interest, to protect the confidentiality of information and to prevent the misuse of material non-public information. As a result of these policies, Citadel and the Funds generally are not permitted to access certain information in Citadel Securities, and similarly Citadel Securities generally is not permitted to access certain information in Citadel.

Citadel and Citadel Securities do not coordinate their trading activities, and as with any two market participants that do not coordinate trading activities, the trading activities of Citadel Securities may inadvertently have adverse impacts on the trading activities and performance of one or more Funds, and vice versa. Such adverse impacts could relate to the availability, pricing, terms or other characteristics of securities or other investments of the Funds. Citadel and Citadel Securities each operate certain businesses, and pursue certain investment strategies, that overlap and compete with one another for investment opportunities, finite resources such as corporate access, and candidates when recruiting personnel. Such overlap and competition, which may increase over time, could exacerbate the adverse impacts described above.

Citadel Group’s principals and their related persons own a substantial majority of Citadel Securities, which could incentivize Citadel Related Parties to favor Citadel Securities.

Certain regulations impose limitations on the amount of securities or other instruments that can be held by related parties or require disclosure of, or impose restrictions on purchases or sales of securities or other instruments held by, related parties. Certain of these regulations require the aggregation for regulatory purposes of instruments held by the entities or accounts managed or owned by Citadel and Citadel Securities, notwithstanding the separation between Citadel and Citadel Securities. As a result, from time to time, such regulations (or policies related to such regulations) prohibit the Funds from acquiring or selling particular securities or instruments, limit the amount of particular securities or instruments that the Funds may acquire or sell, and/or require the Funds to disclose their ownership of such securities.

Citadel Clearing

Citadel Clearing LLC is a broker-dealer registered with the SEC and a member of FINRA. In this Brochure, Citadel Clearing LLC, Citadel Institutional Finance Company Ltd., and CCLC Holdings LLC (“Citadel Clearing Holdco”) are collectively referred to as “Citadel Clearing.” Citadel Clearing LLC and Citadel Institutional Finance Company Ltd. are wholly owned by Citadel Clearing Holdco and perform Clearing Services for the Citadel Clearing Funds. Citadel Clearing Holdco is substantially owned by the Citadel Clearing Funds, although a small portion of Citadel Clearing Holdco is owned directly by an entity owned and controlled by principals of Citadel Group.

The Citadel Clearing Funds made contributions to Citadel Clearing Holdco in exchange for equity and debt therein. The equity of Citadel Clearing Holdco (and the contribution of capital associated therewith), and the loan obligations (together, the “Citadel Clearing Interest”), will be reallocated among the Citadel Clearing Funds at such times and in such manner as is determined by the Advisers in their discretion (including, without limitation, due to changes in the relative amount of Clearing Services being provided by Citadel Clearing to each Citadel Clearing Fund). To the extent that Citadel Clearing requires additional capital, the Advisers may require the Citadel Clearing Funds to contribute additional capital, or increase the size of their loan, to Citadel Clearing Holdco. Although the overall size of each Citadel Clearing Fund’s allocable portion of the Citadel Clearing Interest may vary over time, the ratio of debt to equity is expected to be similar across the Citadel Clearing Funds.

There may be conflicts of interest associated with decisions made by the Advisers on behalf of a Citadel Clearing Fund in respect of the Citadel Clearing Interest, including the renewal of the loan, as actions taken by one Citadel Clearing Fund may have a material adverse effect on another Citadel Clearing Fund. For example, in the event that fulfilling a loan obligation, or making an additional capital contribution, to Citadel Clearing Holdco would cause stress to a Citadel Clearing Fund’s portfolio, the Advisers will face conflicts of interest in determining whether to cause such Citadel Clearing Fund to make such payments to the detriment of such Citadel Clearing Fund, or advising the Citadel Clearing Fund not to make such payments to the detriment of Citadel Clearing and the other Citadel Clearing Funds.

There may be conflicts of interest associated with the determination of the commission rates, transaction costs, custodial fees and clearing and financing costs paid by the Citadel Clearing Funds to Citadel Clearing, and the reallocation of the Citadel Clearing Interest among the Citadel

Clearing Funds including as a result of Citadel Related Parties having an interest in one or more Citadel Clearing Funds.

Certain personnel provide services for both Citadel Clearing and Citadel Securities, and the allocation of their time and attention may involve conflicts of interest. Furthermore, because each of the Funds (through Citadel Clearing) and Citadel Securities conducts its own Clearing Services, they may compete for counterparty capacity and financing in connection therewith.

Palafox Trading LLC

Palafox Trading LLC (“Palafox”) is registered with the SEC as a broker-dealer, is a member of FINRA, a member of the Securities Investor Protection Corporation and a clearing member of the Fixed Income Clearing Corporation and LCH RepoClear. Palafox’s business focuses on repurchase and reverse repurchase transactions involving certain types of government securities.

Commodities and Futures

Commodity Pool Operator; Commodity Trading Advisor

Citadel Advisors is registered with the CFTC as a commodity pool operator and a commodity trading advisor. Citadel Advisors is also a member of the NFA. Certain management persons of Citadel Advisors are principals approved by the CFTC and NFA, and also may be registered with them as associated persons.

Futures Commission Merchant

Citadel Futures Clearing LLC is a FCM exempt from registration with the NFA, but is subject to limited oversight by certain regulatory authorities and is required to comply with certain laws, rules and regulations. The Advisers may clear a substantial portion of certain Funds’ commodities-related futures trades in various asset classes through Citadel Futures Clearing. The Advisers believe that obtaining such services from Citadel Futures Clearing is in the best interests of such Funds because, among other things, it reduces reliance on and exposure to third-party FCMs, and creates a direct risk-management relationship with relevant futures clearing houses.

Item 11 – Code of Ethics, Participation or Interest in Client Transactions and Personal Trading

Code of Ethics and Personal Trading Policy

Citadel has adopted a code of ethics and personal investment policies in furtherance of its commitment to compliance with applicable laws and standards of business conduct. Citadel prohibits employees from using or attempting to use their position at Citadel to obtain improper personal benefits for themselves or any other person.

Citadel Group’s personal investment policies permit employees to invest for their personal accounts, subject to certain guidelines and restrictions. All personal securities transactions by employees, by certain of their family members, and in accounts in which supervised persons or certain of their family members have a financial interest, must be conducted in accordance with

the requirements of Citadel Group's personal investment policies. Among other things, Citadel Group's policies require that certain personal securities transactions by employees or certain of their family members be approved in advance by the compliance department. Certain personal securities transactions are subject to a minimum holding period. Employees must report certain personal securities holdings upon employment and periodically thereafter. Citadel Group's compliance department receives electronic feeds of personal securities transactions at approved brokers.

Citadel will provide a copy of its code of ethics and personal investment policies to an investor or prospective investor in the Funds upon request.

Citadel Group has adopted policies and procedures intended to prevent employees from being unduly influenced in their decisions by the receipt of gifts or other inducements from third parties, such as trading counterparties, vendors or investors. Employees are required to report and obtain approval for certain business gifts and are prohibited from accepting or giving certain types of business gifts. In addition, Citadel Group's policies set forth standards for business entertainment provided by third parties, or provided by employees of the Citadel Parties to others.

Conflicts of Interest

The interests of Citadel Related Parties (including the Advisers) may conflict with the interests of the Funds. The following discussion details certain potential or existing conflicts of interest; however, the following does not purport to be a complete list or description of all of such potential or existing conflicts of interest. Citadel Group has established policies to address certain of the conflicts addressed below; however, such policies will not necessarily eliminate or mitigate all effects that such conflicts (and any other conflicts) may have on the Funds.

Management of Other Citadel Funds

Certain Citadel personnel implement investment strategies on behalf of multiple Funds, including the Funds owned solely or substantially by Citadel Related Parties. The Advisers may have incentives to favor certain Funds over others because performance-based compensation is calculated separately for each Fund. For example, if a particular Fund suffered losses early in a year and the prospects for it generating Performance Allocations were remote, while the investors in other Funds were generally above their "high water marks" for incentive compensation purposes, the Advisers would have an incentive to favor the Funds whose investors are above their "high water marks." See Item 6, Performance-Based Fees and Side-By-Side Management. Certain Citadel personnel may also be compensated separately and using different formulas with respect to the performance of the Funds or particular investment strategies within those Funds, which may create an incentive for such personnel to favor the Funds that are more likely to impact their compensation.

Citadel Related Parties have different economic interests in different Funds. Certain personnel who implement investment strategies on behalf of the Funds hold, either directly or through employee incentive programs, an investment in one or more Funds, but not other Funds, or hold a substantially larger investment in one or more Funds than they hold in other Funds. Accordingly, such personnel have incentives to cause investments to be made, managed or realized in a manner that benefits certain Funds or to otherwise favor certain Funds over other Funds.

Directors may serve simultaneously as directors of multiple Funds and may have incentives to favor certain of such Funds over other such Funds.

The Funds pay the Citadel Parties pass-through expenses based on their share of the overall expenses of the Citadel Parties' operations (including performance bonuses). In addition to paying pass-through expenses, certain Funds also pay Citadel Hedge Fund Holdings LP a fixed management fee.

From time to time, the Advisers determine, as a result of different investment objectives, time horizons, investment strategies, current portfolio holdings and weightings, tax considerations, regulatory considerations, working capital, risk levels and/or other considerations (each of which may be considered individually or in combination with other considerations), that certain investments or investment strategies (or the investment personnel that manage such strategies) should be allocated to some Funds rather than other Funds or that certain Funds should be given priority access thereto. Further, the Advisers may determine not to pursue, or to cease pursuing, certain investment opportunities or strategies on behalf of a Fund if such opportunities or strategies may have an adverse impact on one or more other Funds that invest in some or all of the same sub-funds as such Fund or the investors therein. The Advisers may have an incentive to cause investments to be made, managed or realized, or to allocate investment strategies in a manner designed, to advance the interests of one or more particular Funds over those of one or more other Funds.

The Advisers, on behalf of a Fund, may take a position that is different from, and potentially adverse to, a position taken by another Fund, invest in a different security of an issuer's capital structure in which another Fund is invested, invest in the same security but on different terms than another Fund, obtain exposure to an investment using different types of securities or instruments than another Fund, engage in short selling securities that another Fund holds, vote securities in a different manner than another Fund, and/or acquire or dispose of its interests at different times than another Fund. This could have a material adverse effect on one or more of such Funds, including by diluting or otherwise disadvantaging the values, prices, or investment strategies of such Funds. When the Advisers, on behalf of a Fund, manage or implement a portfolio decision ahead of, or contemporaneously with, portfolio decisions for another Fund, market impact, liquidity constraints, or other factors could result in such Fund receiving less favorable pricing or trading results, paying higher transaction costs, or being otherwise disadvantaged. In addition, in connection with the foregoing, the Advisers, on behalf of a Fund, may pursue or enforce rights or actions, or refrain from pursuing or enforcing rights or actions, with respect to a particular issuer in which another Fund has invested, even though such actions or inaction could materially adversely affect such other Fund. Furthermore, to the extent that a particular Fund has an investment in the same issuer as another Fund, the Advisers may be incentivized to take the interests of such other Fund into account in connection with making decisions on behalf of the particular Fund, or the interests of the particular Fund into account in connection with making decisions on behalf of the other Fund, even though taking such interests into account could materially adversely affect the particular Fund or such other Fund. Certain of the transactions in which the Advisers engage create the risk that the capital attributable to one Fund could be subject to liabilities relating to other Funds.

Other Activities of the Advisers

By reason of the other business or investment activities of the Advisers, from time to time, the Advisers acquire confidential information or otherwise become restricted in their investment activities and are not free to act upon such confidential information. As a result, the Advisers may be restricted from initiating a transaction for a Fund which the Advisers otherwise might have initiated, and such Fund may, as a result, be required to maintain a position that it otherwise might have liquidated, or be required to refrain from acquiring a position that the Advisers otherwise might have acquired on behalf of such Fund.

Certain Citadel personnel from time to time are active in and serve on the management committees of various exchanges, clearing houses, self-regulatory organizations and trade associations in which a sub-fund is a member. Moreover, such personnel from time to time serve on the board of directors of such an organization or association. In addition, certain Citadel personnel from time to time serve on the board of directors of, or a creditors' committee in respect of, an issuer in which a Fund invests or is contemplating investing. Such personnel have an inherent conflict of interest between discharging their obligation in such capacities and acting in the interest of such Fund.

Citadel Related Parties from time to time hold investments in vendors or other service providers that provide services of the type utilized by or in connection with the Funds. The investments may incentivize the Advisers and its affiliates to engage such vendors or service providers to provide services to the Funds, as such engagement may directly or indirectly benefit the Citadel Related Parties.

Citadel Related Parties hold minority ownership stakes in certain exchanges (e.g., MEMX) and, in connection therewith, stand to benefit from the profits such exchanges derive from orders routed to such exchanges. As such, the Advisers may be incentivized to route the Funds' transactions to such exchanges. Notwithstanding the foregoing, the Advisers will only route the Funds' transactions (or advise brokers of its preference to route transactions on behalf of the Funds) to such exchanges if doing so is otherwise consistent with its obligation of seeking to obtain best execution and other applicable regulations.

Citadel Related Parties, including Citadel Securities, are engaged in a wide range of investment opportunities and other activities, and the principles of the doctrine of "corporate opportunity" or other similar rights or claims will not apply to such investment opportunities or other activities of such Citadel Related Parties. The Citadel Related Parties, including Citadel Securities, are under no obligation or other duty to provide investment opportunities to any Fund.

Citadel Related Parties, including Citadel Securities, buy and sell investment instruments for their own accounts and/or the accounts of others, which from time to time raises conflicts of interests, including those described herein in connection with the management of other Funds by the Advisers. Such transactions may be the same as or different from those which the Advisers execute for the Funds. The Advisers may, but will have no obligation to, engage in any transaction or make any investment for the Funds, irrespective of whether one or more Citadel Related Parties does so for their own accounts or for the account of any other person, and none of the Funds nor any Fund investor will have any first refusal, co-investment or other right with respect to any such transaction or investment.

No specific obligations or requirements are imposed concerning the allocation of the Citadel Related Parties' time, effort or investment opportunities to the Funds, and there are no restrictions on the nature or timing of investments for the Funds. Principals of Citadel Group are not obligated to devote any specific amount of their business time to the affairs of the Advisers, and the Advisers are not required to accord any exclusivity or priority to any Fund in the event of "limited availability" investment opportunities and, as a result, conflicts of interest are likely to arise.

Although the Advisers believe that the terms on which the Citadel Parties will provide accounting, data processing, investment research, quantitative research and other services to the Funds are reasonable, the arrangements among the Advisers, the Citadel Parties, and the Funds are not negotiated on an arm's-length basis and the Advisers can give no assurance that any conflicts of interest will be resolved in favor of the Funds.

Shared Personnel; Expense Allocation

Notwithstanding the separation between Citadel and Citadel Securities, certain personnel of Citadel Enterprise and its affiliates provide services to both Citadel and Citadel Securities. Such personnel include, without limitation, certain individuals within the treasury, accounting, legal, tax, risk, compliance, operations, technology and human resources departments. In addition, from time to time, certain personnel that are primarily dedicated to either Citadel or Citadel Securities provide services to the other unit, on either an extended or project-specific basis. Such personnel include, without limitation, certain persons within the treasury, accounting, legal, tax, risk, compliance, operations, technology, quantitative research and development, and human resources departments of Citadel and/or Citadel Securities. Moreover, certain senior management of Citadel are involved in strategic, governance, operational and/or other management decisions or activities related to Citadel and Citadel Securities. With respect to the foregoing shared personnel, certain information sharing is unavoidable and certain conflicts of interest exist in connection with the allocation of such persons' time and attention among various Funds, and between Citadel or Citadel Clearing and Citadel Securities. Citadel has adopted policies to address such conflicts but there can be no assurance that such policies will successfully eliminate or mitigate all of such conflicts in every case.

Certain personnel that provide services to or for the benefit of a particular Fund, including personnel who implement investment strategies on behalf of the particular Fund, also provide similar services to or for the benefit of other Funds, including Funds owned solely or substantially by Citadel Related Parties. Certain conflicts of interest arise in connection with the allocation of such persons' time and attention among various Funds.

Citadel Enterprise and its affiliates will determine, in their discretion, how to allocate costs and expenses among the Funds, as well as between Citadel and Citadel Securities, including costs and expenses associated with shared personnel, occupancy, technology, infrastructure, data and other resources. The methodology used in making such allocation determinations may vary based on the type of cost or expense being allocated and may take into account such factors as Citadel Enterprise and its affiliates deem appropriate (e.g., relative headcount, projected usage, or capital). While Citadel Enterprise and its affiliates believe that their allocation methodology is appropriate, it has not been negotiated on an arm's-length basis, it involves subjective determinations by Citadel Enterprise and its affiliates and the use of a different reasonable allocation methodology may result

in fewer costs being borne by the Funds. Citadel Enterprise and its affiliates can give no assurance that any conflicts of interest associated with such allocation will be resolved in a manner that does not harm the Funds economically or that benefits the Funds appropriately. Citadel Enterprise and its affiliates may change their allocation methodology from time to time without notice to investors.

Citadel Related Party Transactions

The Funds may, from time to time, purchase (or sell) investment instruments from (or to) Citadel Related Parties or the Funds, including Funds in which Citadel Related Parties hold a significant interest. In addition, the Funds may, from time to time, purchase or sell investment instruments with and through Citadel Related Parties or Funds in which Citadel Related Parties hold a significant interest. With respect to certain investment strategies, such transactions may occur regularly and frequently. Certain of these transactions may be effected on a principal, cross, agency or “agency cross” basis. In making the determination to effectuate a transaction between a Fund and another Fund or a Citadel Related Party, the Advisers may consider such factors as it determines in its discretion, including the investment strategies of such Fund and other Funds, and whether a particular investment or investment strategy may have adverse tax, regulatory or other consequences to a particular Fund or certain investors therein but not to others.

Certain Funds may establish a representative committee of such Fund’s investors and/or independent third parties (each, an “investors’ representative committee”) that will have the power and the authority to: (i) provide consent to individual principal trades on the Fund’s behalf in compliance with Section 206(3) of the Investment Advisers Act of 1940 (the “Advisers Act”); and (ii) provide and revoke blanket consent to agency cross transactions in compliance with Advisers Act Rule 206(3)-2 (“Rule 206(3)-2”). Each investors’ representative committee will receive, on behalf of the applicable Fund, the requisite disclosures concerning such transactions, including the confirmations and annual statement of agency cross transactions required by Rule 206(3)-2. The above-mentioned procedures are intended to address the actual and potential conflicts of interest inherent in any principal or agency cross transaction in which the involvement of the Advisers or a Citadel Related Party may create conflicting duties of loyalty.

In the ordinary course of their investment activities, the Funds may also borrow, pledge, lend and otherwise finance various investment instruments with and among Citadel Related Parties and Funds in which Citadel Related Parties hold a significant interest, on both a secured and unsecured basis.

The Funds may make loans to, obtain loans from and guarantee the obligations of the Advisers, any Citadel Related Party and/or any other person; employ, consult or contract with (and in connection therewith pay compensation to) any Citadel Related Party and/or any other person; invest in, contribute capital to, participate or otherwise deal with, the Advisers, any Citadel Related Party and/or any other person, irrespective of whether the financial, tax or other allocations made by any of the foregoing are made on a pro rata basis. In addition, certain Funds guarantee or otherwise provide credit support for their pro rata portion of certain obligations of the sub-funds.

Any Citadel Related Party may serve in any capacity with the Funds.

The Funds borrow, pledge and lend securities or other investment instruments in the ordinary course of their investment activities and may do so with third parties as well as with other Funds on a secured and unsecured basis. Such transactions among different Funds are not subject to approval by such Funds' investors' representative committees (if applicable), but involve potentially material conflicts of interest; for example, one Fund paying lending fees to another Fund or allocating "hard to borrow" securities to, as well as "calling in" borrowed securities from, such Fund. Such financing activities may enable a Fund to invest in certain investment instruments in which it otherwise would not be able to invest.

The Advisers may clear a substantial portion of certain Funds' trades to and through Citadel Clearing acting as clearing broker. The Advisers believe that obtaining such services from Citadel Clearing is not opposed to the best interests of such Funds and that the terms of such arrangements are consistent with the terms that would reasonably be expected in a comparable transaction or arrangement between unrelated parties.

Valuations

Each Adviser is responsible for determining the fair market value of the applicable Fund's investment instruments. In doing so, the Advisers will have considerable discretion in valuing certain privately placed and less liquid investment instruments. The Advisers may have to use their subjective judgment in valuing certain investment instruments.

The Advisers have adopted pricing methodologies for the valuation of the Funds' investment instruments as described in each Fund's Offering Documents, and investment instruments held by sub-funds which are not consolidated in the books and records of the Funds will be valued in accordance with the governing documents of each sub-fund, provided that such governing documents provide for a valuation protocol materially similar to that established in the Funds' Offering Documents.

The Advisers generally face a conflict of interest in valuing such investment instruments because these values will affect their compensation. The Funds may retain third parties to verify the Advisers' methodology for determining fair market values and to conduct independent price verification exercises.

Diverse Interests

The various types of investors in the Funds, including the Advisers and Citadel Related Parties, may have conflicting investment, tax and other interests with respect to their investment in the Funds. When considering a potential investment for a Fund, the Advisers will generally consider the investment objectives of the Fund, as a whole, not the investment objectives of any investor individually. The Advisers may make decisions, including with respect to tax matters, from time to time that may be more beneficial to one type of investor (or former investor) than another, or to the Advisers and Citadel Related Parties than to investors unaffiliated with the Advisers.

Investment by Other Funds

Certain Funds (including Funds owned solely or substantially by Citadel Related Parties) invest in the same sub-funds. There are limited or no restrictions on the redemptions and subscriptions,

including for purposes of allocating and reallocating capital among different sub-funds, by such Funds to and from such sub-funds and certain Funds may have less restrictive redemption provisions than those applicable to other Funds. Such redemptions may be made in order to fund redemptions from such Funds or for other reasons, as well as on an ongoing basis in the course of implementing such Funds' investment approach. Such redemptions and subscriptions of capital may materially adversely affect certain Funds and may disadvantage investors in one Fund vis-à-vis investors in such other Funds.

Investors' Representative Committee

Certain Funds may establish investors' representative committees, which provides a mechanism for the Advisers to obtain the informed consent of investors to a transaction if the Advisers believe such consent is required or advisable in the context of a particular transaction, including transactions that may involve a conflict of interest. Each investors' representative committee may consist of Fund investors and/or independent third parties. The same representatives may serve on the investors' representative committee for multiple Funds. The investors' representative committees have been structured with the purpose of ensuring that it is independent of the Advisers, and, in fact, acts in the interests of Fund investors.

Proxy Voting

When an Adviser votes proxies on behalf of a particular Fund, it generally will do so in the interest of maximizing Fund investors' value (taking into consideration both the short- and long-term implications of the proposal). An Adviser may choose not to vote if doing so would be costly or impractical or the Adviser otherwise deems it to be unnecessary or unwarranted for any other reason. The Advisers utilize a third-party service provider to assist in implementing their proxy voting procedures.

Different Terms

Investors in a particular Fund may participate in such Fund on different or more favorable terms than other investors in the same class of interests in the Fund. For example: the Advisers may agree to provide certain investors with additional or different information (including more detailed and/or frequent information relating to the sub-funds' investment portfolio and underlying positions) regarding the Fund from that generally made available to other investors in the applicable Fund, the Advisers may permit other Funds (which may have only a single investor) to invest in the same sub-funds as does a particular Fund but such Funds may have less restrictive subscription and redemption provisions than those applicable to such particular Fund, or the Advisers may waive or reduce the Management Fee or Performance Allocation for one or more Fund investors.

In determining whether to allow certain investors to invest in a particular Fund or multiple Funds to invest in the same sub-funds on any one or more different terms, the Advisers may consider a number of factors. One consideration will be whether the Advisers believe the different terms have a material adverse effect on the other investors considered as a group or the particular Fund as compared to other Funds. The Advisers may also consider, among other factors: (i) the benefit to the particular Fund or sub-fund from the additional capital that the prospective investor or other

Funds would contribute; (ii) the particular legal, regulatory, tax or other characteristics or needs of the prospective investor or other Fund; and/or (iii) whether granting such terms is inconsistent with representations made by the particular Fund or the Advisers to other investors in the particular Fund.

Item 12 – Brokerage Practices

Subject to each Fund’s disclosed investment objectives, policies and strategies, the Advisers have complete discretion to determine the securities they will buy or sell and in what amounts, the broker-dealers and other financial intermediaries the Advisers will use in effecting transactions for the Funds, and what commission rates the Advisers will pay for such transactions. A more detailed discussion of how the Advisers make use of this authority follows.

Brokerage

The Advisers select the broker-dealers and other financial intermediaries used to effect transactions on behalf of the Funds and may select or recommend the selection of broker-dealers and other financial intermediaries. The Advisers extensively use the Clearing Services of Citadel Clearing on behalf of the Citadel Clearing Funds in an effort to optimize their funding framework and achieve certain operational efficiencies.

In selecting or recommending broker-dealers and other financial intermediaries to effect portfolio transactions, the Advisers may cause a Fund to enter into arrangements pursuant to which the Fund pays transaction costs in an amount greater than would be incurred if another broker-dealer or other financial intermediary were used. The Advisers are not required to solicit competitive bids or seek the lowest available commission or transaction costs.

The transactions executed by the Funds may be cleared through, and the Funds’ investment instruments may be held by, a number of financial institutions selected by the Advisers on terms negotiated with each such financial institution individually. The Advisers, on behalf of the Funds, generally use a variety of financial institutions both to take advantage of differing expertise and capabilities and to avoid, due to credit and confidentiality considerations, having all investment instruments concentrated at one or only a few firms.

Certain Funds often invest on the basis of short-term market considerations. The turnover rate of such Funds’ positions may be significant, potentially involving substantial brokerage commissions and other fees and expenses.

Use of Soft Dollars to Obtain Research

In addition to brokerage services, and subject to applicable law, the Advisers receive products and services from a Fund’s broker-dealers (in respect of the Fund’s investing). The Advisers generally will use “soft dollars” that they believe are within the safe harbor created by Section 28(e) of the 1934 Act. Services the Advisers may receive from such broker-dealers may include research, general market commentary, economic information, trading advice, industry and company commentary, technical data, recommendations, general reports, quotations and other market data or information, and the arrangement of meetings with the management of issuers. The Advisers benefit from these arrangements because the Advisers do not have to produce or pay for the

research, products or services received. The Advisers may have an incentive to select or recommend a broker-dealer based on their interests in receiving soft dollar benefits rather than on the Funds' interest in receiving most favorable execution. The services a Fund receives and pays for from broker-dealers may be used by Citadel Related Parties, including in servicing other Funds, and the Advisers may not use certain of such services to benefit the Funds. The Advisers follow procedures they believe are reasonably designed to ensure that soft dollars are used in a manner consistent with seeking best execution, and to ensure that the Advisers identify which services are within or outside the safe harbor.

Allocation of Investment Opportunities

While the Advisers use reasonable efforts to allocate investment opportunities among the Funds, including Funds owned solely or substantially by Citadel Related Parties, in a manner which the Advisers deem equitable over time (giving due consideration to the difference among the investment strategies employed on behalf of the various Funds), there can be no assurance that any Fund will be treated equally or pro rata. The Advisers consider factors that they deem relevant in determining how to allocate investment opportunities among the Funds, which may include investment objectives, time horizons, investment strategies, current portfolio holdings and weightings, tax considerations, regulatory considerations, working capital, risk levels and/or other considerations, each of which may be considered individually or in combination with other considerations.

Due to regulatory restrictions, certain Fund investors generally may not be permitted to participate in certain increases and decreases in a Fund's asset value. Consequently, such increases and decreases generally are allocated entirely to the other investors' capital accounts. As a result of such non-pro rata allocations, it is possible that losses properly attributable to one or more Fund investors could be borne by other Fund investors.

Aggregation of Trade Orders

Subject to the Advisers' principal objectives of seeking to obtain best execution and treating each Fund fairly, the Advisers are permitted to aggregate orders they send to the market for more than one Fund managed by the Advisers and determine an allocation method for aggregated orders. The Advisers may use various allocation methods. Regardless of the allocation method chosen, adjustments may be made to allocations, such as to avoid excessively small allocations.

Item 13 – Review of Accounts

One or more senior members of a portfolio management team have primary responsibility for reviewing Fund investment portfolios and do so either individually or in a group depending upon each Fund's needs and the conditions of each market. Portfolio managers typically perform intraday, daily, weekly or monthly reviews of positions as they deem appropriate, or otherwise as they feel is needed. Among other reasons, portfolio managers may undertake reviews because of changes in market conditions, changes in security positions, or changes in the Advisers' strategy for a Fund. Performance in connection with investment objectives, security positions and other investment opportunities are among the matters that a portfolio manager might consider. The number of Funds the Advisers assign to portfolio managers varies as a result of differing Fund

characteristics and changes in strategy over time. The Advisers manage certain positions using automated systems and/or trade using automated systems.

The Funds typically provide in writing to investors audited annual financial statements, periodic unaudited performance reports, and, for U.S. Funds, all tax information relating to their investments in the Fund necessary for U.S. federal income tax purposes. Other information may be provided as agreed upon with a Fund or an investor.

Item 14 – Client Referrals and Other Compensation

Information required by this item is not applicable to the Advisers.

Item 15 – Custody

The funds and securities owned by the Funds are held by qualified custodians. Fund investors receive annual financial statements audited by an independent public accounting firm for the Funds in which they have invested. Fund investors are urged to carefully review such statements.

Item 16 – Investment Discretion

The Advisers exercise discretion in managing the investments of each Fund, based on the Fund's particular investment objectives, policies and strategies disclosed in its Offering Documents.

Item 17 – Voting Client Securities

The Advisers have adopted written Proxy Voting Policies and Procedures intended to satisfy the requirements of Rule 206(4)-6 under the Advisers Act. Conflicts of interest between the Advisers and the Funds with respect to voting proxies are identified and addressed pursuant to the Proxy Voting Policies and Procedures. Following is a summary of the key provisions:

When the Advisers vote proxies on behalf of a Fund, the Advisers generally will do so in the interest of maximizing value to such Fund (taking into consideration both the short- and long-term implications of the proposal).

The Advisers may choose not to vote if doing so would be costly or impractical or the Advisers otherwise deem it unnecessary or unwarranted for any other reason.

The Advisers utilize a third-party service provider to assist in implementing their proxy voting procedures.

Funds may obtain information about how the Advisers voted proxies for securities in their accounts or obtain a copy of the Advisers' written proxy voting policy by contacting Citadel's Client and Partner Group.

The Advisers will generally file class action claims on behalf of a Fund when doing so is in the interest of maximizing value to such Fund (taking into consideration both the short- and long-term implications of such claim).

The Advisers utilize a third-party service provider to assist in class action claim filings and settlement processing.

Item 18 – Financial Information

Information required by this item is not applicable to the Advisers.

Appendix A

Notice of Privacy Policy

Citadel considers privacy to be a fundamental component of its overall business, and it is particularly critical with respect to its relationship with its investors. In the course of managing the Funds, the Advisers collect personal information (“Personal Information”) about their natural person investors and the employees, partners, members, directors, representatives or similar of corporate investors who are located in the European Economic Area (“EEA”), Switzerland or the United Kingdom (“UK”) (each an “EEA/Swiss/UK investor representative”). Please read this notice carefully to understand what the Advisers do with Personal Information pursuant to Citadel’s Privacy Policy. The Advisers collect this information in order to know who their investors are and to meet their obligations under applicable laws and regulations.

Please note that the Advisers are committed to maintaining the confidentiality, integrity and security of Personal Information at all times.

Collection of Personal Information

Citadel collects and retains Personal Information only as permitted by law and when Citadel reasonably believes doing so would be useful in furtherance of carrying out Citadel’s responsibilities. Citadel may collect Personal Information from:

- subscription and other forms submitted to Citadel;
- correspondence, written or electronic, and/or telephone discussions or contacts with investors;
- use of the Investor Portal;
- transaction history of investor account(s) with Citadel; and
- information made available from third parties (e.g., transfer applications).

Personal Information that Citadel collects may include, but is not limited to, investor and EEA/Swiss/UK investor representative:

- names, addresses and telephone numbers;
- social security numbers, national insurance and/or tax identification numbers;
- passport details including but not limited to identification numbers;
- financial circumstances and income;
- account holdings and transactions;
- wire transfer instructions; and
- other Personal Information provided to us.

Citadel uses Personal Information in the course of business, for tasks such complying with or carrying out Citadel’s regulatory or other obligations and/or responsibilities, as processing

transactions, maintaining investor accounts, and responding to court orders and legal or regulatory investigations. The Advisers may also use this information to communicate with investors and offer products and services to investors. For further details regarding the use of Personal Information under EU, UK and Swiss data protection laws, please refer to the Privacy Notice for Data Subjects in the EEA, Switzerland and UK or for the use of Personal Information under the California Consumer Privacy Act, please refer to the Privacy Notice for California Residents, both published on www.citadel.com/privacy.

Disclosure of Personal Information

The Advisers do not knowingly disclose or transfer Personal Information to third parties, except: (1) to professional service providers who need to know such information in order to carry out Citadel's operations; (2) to regulators (for example, Citadel may be required to report an investor's income to taxation authorities); (3) to market intermediaries; or (4) as otherwise permitted or required by applicable law.

The disclosure practices set forth above are consistent with U.S. Federal privacy and related laws, and in general, investors may not limit the Advisers' use of their Personal Information for these purposes under such laws. The Advisers note that the U.S. Federal privacy laws only give investors the right to limit certain types of information sharing in which they do not engage (e.g., sharing with their affiliates certain information relating to their investors' transaction history or creditworthiness for their use in marketing to such investors, or sharing any Personal Information with non-affiliates for them to market to such investors).

Due to the international operations of Citadel, where necessary to deliver relevant services, Personal Information for EEA/Swiss/UK natural person investors or EEA/Swiss/UK investor representatives may be transferred to countries outside of the EEA, Switzerland or the UK which may not have data protection laws equivalent to those in the EEA, Switzerland or the UK -- including to the U.S. for the purposes of sharing the data with non-EEA/Swiss/UK Citadel affiliates and third parties listed in or contemplated by the preceding paragraph. In addition, such Personal Information may be stored on servers outside the EEA, Switzerland or the UK. Citadel will only transfer Personal Information of EEA/Swiss/UK natural person investors and EEA/Swiss/UK investor representatives outside the EEA, Switzerland or the UK if it has a lawful basis for such a transfer, and after putting appropriate safeguards and any supplementary contractual, organizational and/or technical measures in place to seek to ensure an adequate essentially equivalent level of protection for of the Personal Information to the protection offered by the EU GDPR, the UK GDPR and the Swiss Data Protection Act (as in force and applicable).

Personal Information for natural persons who have a relationship with Citadel Asia is being transferred outside of Hong Kong. Citadel processes this personal information in accordance with its Privacy Policy. In addition, the Advisers' use of personal information may be subject to various privacy laws of Hong Kong, including the Hong Kong Personal Data (Privacy) Ordinance.

Security of Personal Information

Citadel maintains reasonable physical, electronic and procedural safeguards designed to protect against unauthorized access, use, modification and disclosure of Personal Information in our custody and control. Citadel restricts access to Personal Information to employees and service providers who are involved in administering those accounts. The Advisers generally limit access to those who have a need-to-know the information in furtherance of a legitimate Citadel business purpose.

Should you have any questions regarding the Advisers' privacy policies, please feel free to contact Citadel's Client and Partner Group at ClientandPartnerGroup@citadel.com.
